UNIVERSITY
OF
CALIFORNIA

ANNUAL REPORT ON DEBT CAPITAL AND EXTERNAL FINANCE APPROVALS (Calendar Year 2024)

UC FINANCE
CAPITAL MARKETS FINANCE

ANNUAL REPORT ON DEBT CAPITAL AND EXTERNAL FINANCE APPROVALS (Calendar Year 2024)

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PREFACE

The *Annual Report on Debt Capital and External Finance Approvals* is intended to provide the Regents with an overview of the University's debt capital program. This document serves as a background piece that addresses questions related to the University's overall debt capital structure, the University's financial strength as viewed by the capital markets, and the outlook for future financing flexibility. This report also includes a summary of external finance approvals for the 2024 calendar year.

The *Annual Report on Debt Capital and External Finance Approvals* contains the following information:

- Overview the University's outstanding indebtedness,
- Summary of debt issuance over the past calendar year,
- Update on the University's credit ratings, and
- Summary of external finance approvals.

MUNICIPAL MARKET OVERVIEW

In 2024, the municipal bond market demonstrated resilience amidst a backdrop of economic fluctuations and evolving fiscal policies.

Issuance & Supply. A key trend in 2024 was the increase in the supply of municipal bonds, with municipal supply reaching nearly $508 billion, up 32% from 2023. This was due in part to issuers taking advantage of more favorable market conditions over the prior year as well as to the funding of deferred capital projects. In addition, there was a surge of issuance ahead of the November elections.

Tax-Exempt Demand. The increased supply was met with strong demand, particularly from retail investors seeking tax-exempt income through the direct purchase of municipal bonds, retail demand coming from Exchange Traded Funds (ETFs), and retail demand from funds invested in Separately Managed Accounts (SMAs). In addition, municipal bond mutual funds received over $23 billion in inflows during 2024, a reversal from the $15 billion in outflows experienced in 2023.

Interest Rate Environment. Yields on tax-exempt bonds began the year at their highest overall levels since 2011 and rose further throughout the year. 10-year benchmark tax-exempt yields ended 2024 higher by 78 basis points while Treasury yields rose 45-70 basis points from 5-30 years.

MMD	1/2/2024	12/31/2024	△
1-Year	2.65%	2.86%	0.21%
5-Year	2.25%	2.87%	0.62%
10-Year	2.28%	3.06%	0.78%
20-Year	3.13%	3.62%	0.49%
30-Year	3.43%	3.90%	0.47%

Treasury	1/2/2024	12/31/2024	△
1-Year	4.80%	4.16%	-0.64%
2-Year	4.33%	4.25%	-0.08%
5-Year	3.93%	4.38%	0.45%
7-Year	3.95%	4.48%	0.53%
10-Year	3.95%	4.58%	0.63%
20-Year	4.25%	4.86%	0.61%
30-Year	4.08%	4.78%	0.70%

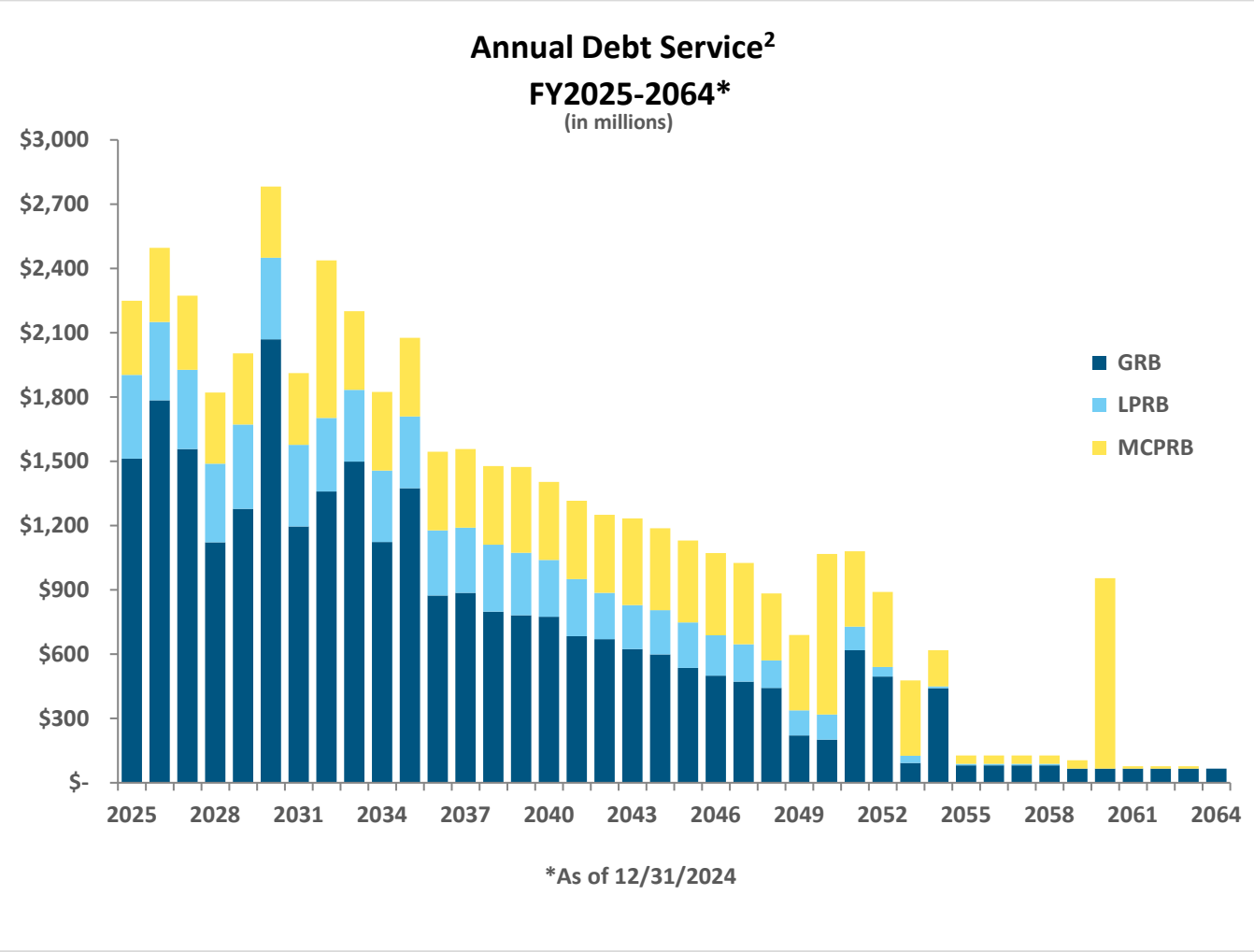
Federal Reserve Policy. Strong economic fundamentals coupled with tempering inflation indicators led the Federal Reserve to begin its rate reduction process in the third quarter. After 50 and 25 basis point rate cuts in September and November, respectively, the Fed indicated in its final meeting of 2024 that it was forecasting fewer cuts in 2025.

Outlook. The municipal bond market is expected to experience tremendous supply in 2025 as issuers grapple with potential implications of tax reform that may limit tax-exempt borrowing in the future.

UNIVERSITY OF CALIFORNIA DEBT OVERVIEW

As of December 31, 2024, the University had approximately $30.0 billion of debt outstanding in its core credits (General Revenue Bond, Limited Project Revenue Bond, and Medical Center Pooled Revenue Bond) and $2.0 billion in authorized commercial paper (CP). The amount of total debt outstanding increased from the previous calendar year, when the University had approximately $28.7 billion of debt outstanding in its core credits as of December 31, 2023.

As of December 31, 2024, the weighted average cost of capital of the outstanding debt for the University's core credits was 3.66% and the average life was 17.6 years.[1] This compares to December 31, 2023, when the weighted average cost of capital of the outstanding debt for the core credits was 3.65% and the average life was 18.8 years.

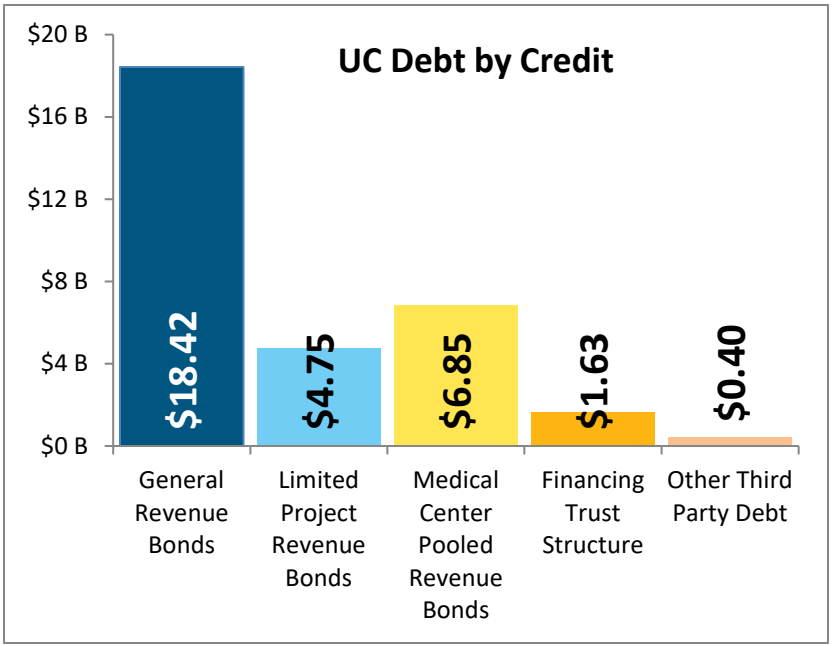


[1] See Appendix B: Debt Assumptions, page 13.

[2] Graph does not show debt service beyond FY 2064, which includes principal and interest on GRB 2012 Series AD ($860 million principal due in 2112), GRB 2015 Series AQ ($500 million principal due in 2115), and MCPRB 2020 Series N ($300 million principal due in 2120). Appendix B: Debt Assumptions, on page 13, lists other assumptions reflected in this graph.

DEBT BY CREDIT TYPE

The University continues to optimize debt issuance by using a differentiated credit structure. The University has issued debt under one of three different credit types: General Revenue Bond (GRB), Medical Center Pooled Revenue Bond (MCPRB), and Limited Project Revenue Bond (LPRB). In addition, the Financing Trust Structure (FTS) credit is selectively used (based on internal guidelines) for student housing projects and other third party structures have been used for certain projects.



CORE CREDITS

General Revenue Bonds ($18.4 billion outstanding). The GRB credit serves as the University's primary borrowing vehicle and is utilized to finance projects that are integral to the University's core mission of teaching, research, and public service, as well as auxiliary and medical center projects. The GRB credit is secured by the University's broadest revenue pledge. Pledged revenues for FY 2023-24 were $21.7 billion. As of December 31, 2024, the weighted average cost of capital of the outstanding GRB debt was 3.67% and the average life was 16.7 years.

Limited Project Revenue Bonds ($4.8 billion). The LPRB credit has been used to finance primarily auxiliary services such as student housing and parking. Pledged revenues for FY 2023-24 were $1.9 billion. The LPRB credit provides the University's bondholders with a subordinated pledge of gross revenues derived from auxiliary facilities financed. As of December 31, 2024, the weighted average cost of capital of the outstanding LPRB debt was 2.95% and the average life was 12.6 years.

Medical Center Pooled Revenue Bonds ($6.9 billion). The MCPRB credit has served as a financing vehicle for the University's five academic medical centers. The Bonds are secured by gross revenues of the medical centers. Pledged revenues for FY 2023-24 were $22.2 billion. As of December 31, 2024, the weighted average cost of capital of the outstanding MCPRB debt was 3.91% and the average life was 23.6 years.

ADDITIONAL DEBT OUTSTANDING

Financing Trust Structure ($1.6 billion). The University has approximately $1.6 billion of outstanding third-party housing debt. The FTS credit includes debt issued by a third party for a project in which the University has an economic interest. The bonds are secured by the revenues of the financed projects.

The FTS has financed housing projects at the Irvine, Riverside, and Davis campuses. These projects include California Statewide Communities Development Authority (CSCDA) Student Housing Revenue Bonds Series 2016, 2017, and 2021 (Irvine Student Housing); California Municipal Finance Authority (CMFA) Student Housing Revenue Bonds Series 2018 (UCR Dundee-Glasgow Student Housing Project); CMFA Student Housing Revenue Bonds Series 2018 (Davis West Village Student Housing Project); CMFA Student Housing Revenue Bonds Series 2019 (UCR North District Phase I Student Housing Project); and CMFA Student Housing Revenue Bonds Series 2021 (Davis Orchard Park Student Housing Project).

Other Third Party Debt ($396.4 million). Currently, the University has approximately $396.4 million in outstanding debt through the California Infrastructure and Economic Development Bank (CIEDB), which financed the costs of the Neurosciences Building at the San Francisco campus (issued in 2010), a research facility for the Sanford Consortium for Regenerative Medicine at the San Diego campus (issued in 2010 and refinanced in 2016), and the Nancy Friend Pritzker Psychiatry Building (2130 Third Street) at the San Francisco campus (issued in 2017). For the bonds related to the Neurosciences Building and 2130 Third Street, the University is required to make base rent payments through a capital lease that equal the debt service on those bonds. For bonds related to the Sanford Consortium project, the University is required to make up any debt service shortfall on those bonds through a debt service payment agreement. In addition, the University has other third party, non-recourse debt for housing projects.

Commercial Paper. The University's commercial paper program has an authorized amount of $2.0 billion. The program is a combination of both taxable and tax-exempt commercial paper and is used for a variety of purposes, primarily to provide interim funding for approved projects that will ultimately be funded using long-term financing. Commercial paper may also be used for other purposes, such as working capital. In calendar year 2024, the monthly average amount of CP outstanding was approximately $1.1 billion. Total CP outstanding at the end of calendar year 2024 was $1.3 billion, of which $1.1 billion was tax-exempt and $192.0 million was taxable.

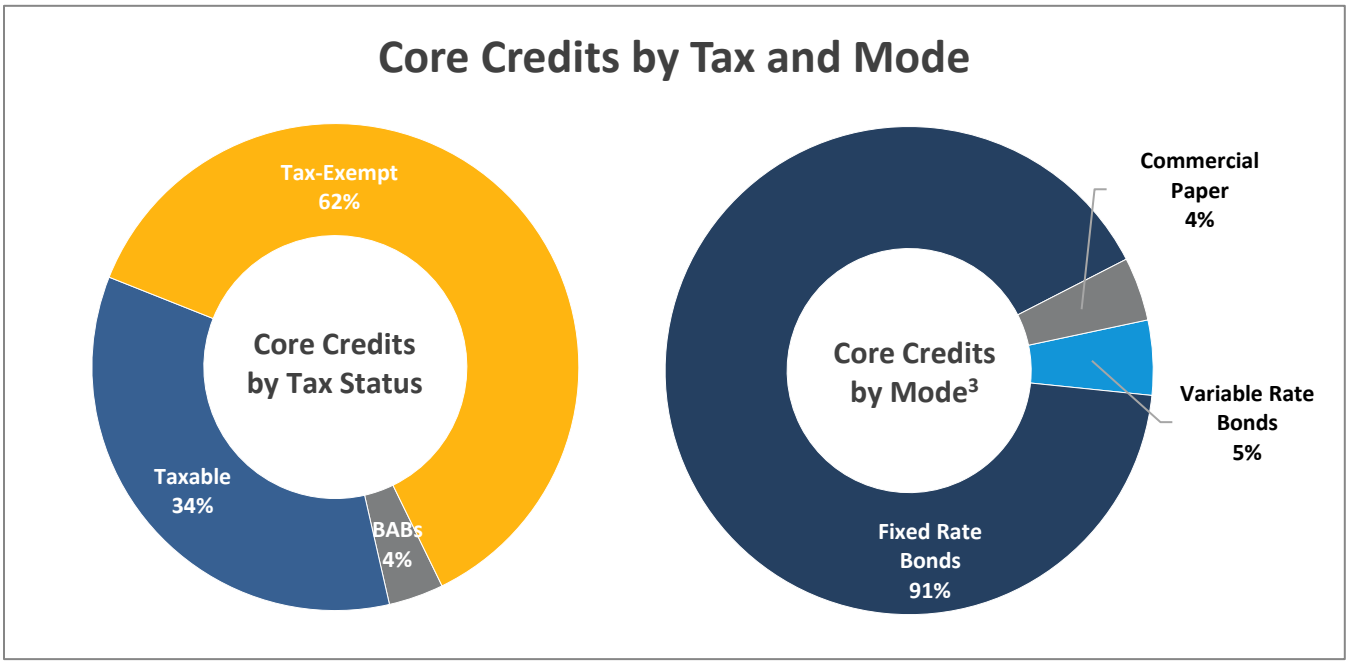
DEBT STRUCTURE

The University has strategically used a variety of financing vehicles, including tax-exempt and taxable debt and fixed and variable rate debt to optimize the debt portfolio and maintain a low cost of capital.

For each bond issue, the University evaluates projects to determine the appropriate mix of tax-exempt and taxable debt. Relative to tax-exempt bonds, taxable bonds provide the University more flexibility with regard to use. The University has also taken advantage of market conditions to issue long-dated taxable debt. Currently, the University has $1.7 billion of century bonds outstanding in the GRB and MCPRB credits.

In addition, the University strategically uses short-term financing to diversify the debt portfolio. Variable rate debt can provide attractive financing rates in the short-term, but with less certainty in the longer term compared to fixed rate debt.

The University has hedged the majority of outstanding variable rate debt with interest rate swaps in order to reduce interest rate risk.[3] At the time of the variable rate bond issuances, the University entered into the interest rate swap agreements under which the University pays a fixed rate to and receives a floating rate from a counterparty.



[3] All variable rate debt has been swapped to fixed rate, except GRB Series Z-1 and Z-2 ($150 million), GRB Series BY ($250 million), a portion of MCPRB Series K ($5.55 million), and a portion of MCPRB Series O ($175,000); does not include CP and bank lines of credit.

2024 DEBT ISSUANCE

The University issued approximately $4.2 billion of GRBs in 2024 to finance various projects across the campuses and to refinance existing bonds.

Dated Date	Series Name	Par Amount ($000s)	Use of Proceeds
February 15, 2024	GRB 2024 BS, BT, and BU	$1,395,895	New Money / Refinancing
March 27, 2024	GRB 2024 BV	$1,092,295	Refinancing
August 1, 2024	GRB 2024 BW, BX, and BY	$1,683,190	New Money / Refinancing

General Revenue Bonds Series BS, BT, and BU. The University issued $1.4 billion of GRB Series BS, BT, and BU in February 2024. The bonds refunded approximately $815.1 million of prior obligations for savings. The bonds also provided approximately $744.3 million to finance new money projects at nine campuses and one medical center.

General Revenue Bonds Series BV. The University issued $1.1 billion of GRB Series BV in March to refund approximately $1.2 billion of existing Build America Bonds (BABs). The BABs were taxable bonds that received a direct subsidy from the federal government for a portion of the interest expense. The transaction resulted in savings and eliminated exposure to future subsidy cuts, which have occurred and were continuing at the time of the transaction. There are periodically proposals to eliminate BAB subsidies entirely.

General Revenue Bonds Series BW, BX, and BY. The University issued $1.7 billion of GRB Series BW, BX, and BY in August. The bonds provided approximately $1.5 billion of new money proceeds to finance projects across all ten campuses and one medical center and refunded approximately $167.8 million of prior obligations for savings.

CREDIT RATINGS

The credit ratings of the University's bonds directly impact the cost of funding: the higher the credit rating, the lower the cost of borrowing, and vice versa. Generally, the credit ratings of major public research universities are a function of several factors, including: operating performance; the amount of debt outstanding; asset base, including endowment and liquidity; state support; student demand; and debt structure and security features. University governance, such as the quality of leadership and management and debt policies and procedures, is also a critical rating criterion.

The University's GRB credit is rated Aa2/AA/AA and the LPRB and MCPRB credits are rated Aa3/AA-/AA- by Moody's, S&P, and Fitch, respectively. The outlooks on the credits are stable. Please see Appendix C for current underlying ratings of the University's various credits and an overview of credit rating definitions.

The University's credit ratings were affirmed by the rating agencies in reports for the University's 2024 transactions. In its January 12, 2024 report that was subsequently affirmed during transactions that followed in March and July 2024, S&P cites the University's "impressive market position and demand for its programs", experienced management team, and strong financial profile as favorable factors for the University. In a January 11, 2024 analysis that was also subsequently affirmed, Moody's highlighted the University's "exceptional strategic position as a globally recognized comprehensive academic medical and research institution with substantial scale and wealth." In addition to the same factors, Fitch, in its January 11, 2024 analysis that was later affirmed also noted "UC system's growing enrollment and very strong student demand characteristics; consistently solid national/international reputation; steady operating performance inclusive of a sizeable and accretive health system; generally steady support from the state of California (IDR AA/Stable); and expectations of flexibility and manageable leverage through a sizable capital improvement program." Offsetting these factors, per each agency's opinions, are the University's continued retiree liabilities, substantial debt relative to cash and investments, and large ongoing capital needs. Please see Appendices D, E, and F to reference the Moody's, S&P, and Fitch rating reports.

DEBT POLICY AND CAPACITY

DEBT POLICY

Regents Policy 5307: University of California Debt Policy (Debt Policy) continues to guide the University's external financing and to provide the strategic framework for issuing additional debt. The Debt Policy requires the University to maintain GRB credit ratings in the "AA" category in order to ensure the University maintains ready access to the debt capital markets at attractive levels. In addition, the policy provides a framework for the campuses and medical centers as they evaluate capital projects. To receive approval for externally financed capital projects, the Debt Policy requires certain metrics to be met by the campuses and medical centers. They are also held accountable for the debt service and compliance related to their individual projects.

Per Debt Policy guidelines, the University will measure and report the system target metrics to the Regents on an annual basis. Below are the University's metrics as of June 30, 2024, which meet the system target thresholds:

University System Target Metrics		
Measure	**University Metric**	**Target Threshold**
Debt Service to Operations	4.1%	≤ 6.0%
Spendable Cash and Investments to Debt	1.4x	≥ 1.0x

DEBT CAPACITY

Debt capacity refers to the amount of incremental debt an institution can issue at a given rating level. It speaks to both source of payment and source of credit: the institution's ability to service the debt from identified revenue sources and the broader financial health of the institution and the security package offered to bondholders. In assessing financial strength, the rating agencies and capital markets focus on certain balance sheet, income statement, and cash flow metrics. Based on an analysis of operating trends and anticipated future debt issuance, the University has the capacity to finance all projects that have been approved but not yet financed or that are contained in the 2024-30 Capital Financial Plan while maintaining a GRB credit rating in the "AA" category in accordance with the Debt Policy. This estimate assumes continued growth in operations and cash and investments in line with recent years and maintenance of operating margins, and takes into account amortization of existing debt, which will regenerate capacity. Actual capacity will vary depending on a variety of factors, including the University's financial performance, continued State support, project types and the performance of new assets, and potential changes in rating agency evaluation criteria.

Appendix A: Summary of External Finance Approvals

The Summary of External Finance Approvals outlines the approval actions taken in the calendar year 2024. It details the total amount of external financing approved by the Regents, the President, or by authority delegated to the Chief Financial Officer, which was allocated to fund capital projects, real estate transactions, and other uses during 2024. The table below provides a summary of the debt and its associated uses approved during this period.

EXTERNAL FINANCE APPROVALS: JANUARY 1, 2024 THROUGH DECEMBER 31, 2024						
Campus	**Project Name**	**Approval Date[1]**	**Approval Type**	**State Funds or Century Bonds[2]**	**Debt Approved ($000s)[3]**	**Total Project Cost ($000s)**
ANR						
	None				$ -	$ -
	ANR Sub-total				$ -	$ -
Berkeley						
	Berkeley Innovation Zone	May	Regental		$ **10,000**	$ 29,020
	Clean Energy Campus Electrified Heating and Cooling Plant, Distribution, and Distributed Energy Resources (Phase 1)	May	Regental	State	$ **436,600**	$ 476,600
	Housing Project #2	June	Regental	State (partial)	$ **100,009**	$ 420,734
	Bancroft Parking Structure Replacement	September	CFO	State (partial)	$ **60,400**	$ 64,400
	Cal Softball Field Renovation Project	November	Regental		$ **29,490**	$ 57,950
	Berkeley Sub-total				$ **636,499**	$ 1,048,704
Davis						
	Wastewater Treatment Plant Diversion	June	CFO		$ **4,771**	$ 4,771
	Segundo Infill Student Housing	July	Regental		$ **98,297**	$ 100,047
	Sacramento Ambulatory Surgery Center	September	Regental		$ **269,689**	$ 569,698
	Folsom Medical Office Building	September	Regental		$ **45,200**	$ 182,540
	Central Utility Plant Modernization and Expansion	November	Regental		$ **406,000**	$ 406,000
	Davis Sub-total				$ **823,957**	$ 1,263,056
Irvine						
	Tenet Healthcare Pacific Coast Network Acquisition*	January	Regental			
	Mesa Court Community Center Expansion	June	CFO		$ **20,300**	$ 45,300
	Falling Leaves Foundation Medical Innovation Building	September	Regental		$ **5,284**	$ 262,599
	Irvine Sub-total				$ **25,584**	$ **307,899**
Los Angeles						
	Acquisition and External Financing of Acute Care Hospital and Associated Structures *	January	Regental			
	Wooden Center Seismic and Program Improvements	March	CFO		$ **41,000**	$ 47,900
	Ronald Reagan UCLA Medical Center Fourth Floor Patient Care Reconfiguration	May	Regental		$ **169,000**	$ 169,000
	Sunset Canyon Recreation Replacement Building	June	CFO		$ **35,000**	$ 36,600
	3301 S. Canfield	July	Regental		$ **30,240**	$ 39,000
	Cogeneration Plant Equipment Replacement	November	Regental		$ **82,500**	$ 82,500
	Los Angeles Sub-total				$ **357,740**	$ 375,000
Merced						
	Classroom and Office Building III	March	Regental	State	$ **8,600**	$ 8,600
	Campus Integrated Utilities Solutions	July	Regental	State	$ **9,925**	$ 9,925
	Merced Sub-total				$ **18,525**	$ 18,525
Riverside						
	Undergraduate Teaching and Learning Facility	March	Regental	State	$ **147,700**	$ 156,300
	2017-2019 Deferred Maintenance & Facility Budget Augmentation Investment Program	May	CFO		$ **779**	$ 15,279
	Riverside Sub-total				$ **148,479**	$ 171,579
San Diego						
	Triton Center	February	CFO		$ **(33,300)**	$ 424,900
	East Campus Loop Road	March	Regental		$ **77,670**	$ 77,670
	UC San Diego Health, JMC Sterile Processing Department (SPD) Expansion	April	CFO		$ **4,000**	$ 7,381
	Hillcrest Outpatient Pavilion and Parking Structure	June	CFO		$ **3,000**	$ 570,275
	Multidisciplinary Life Sciences Building	July	Regental		$ **343,500**	$ 383,500
	La Jolla Medical Center Tower 2	November	Regental	State	$ **110,000**	$ 110,000
	Center for Energy Research - Energy Storage Upgrade	December	CFO		$ **5,560**	$ 17,500
	UC San Diego Health – Jacobs Medical Center Interventional Radiology Pre-Operative Holding	December	CFO		$ **5,297**	$ 5,565
	San Diego Sub-total				$ **515,727**	$ 1,596,791
San Francisco						
	Statewide Energy Partnership Program for UCSF Health Facilities	May	CFO		$ **50,000**	$ 50,000
	Benioff Children's Hospital Oakland New Hospital Building	July	Regental		$ **891,000**	$ 1,491,000
	Clinical and Life Sciences Building*	September	Regental			
	Parnassus Central Campus Site Improvements	September	Regental		$ **90,895**	$ 125,895
	San Francisco Sub-total				$ **941,000**	$ 1,541,000
Santa Barbara						
	27 East Gutierrez Street*	September	Regental			
	Santa Barbara Sub-total				$ -	$ -
Santa Cruz						
	Delaware Redtree Financing *	May	Regental			
	Santa Cruz Sub-total				$ -	$ -
Office of the President						
	None				$ -	$ -
	UCOP Sub-total				$ -	$ -
Total: CY 2024					$ **3,467,511**	$ **6,322,554**

[1] Projects with multiple external financing approvals in the same calendar year are listed with the latest approval date and the cumulative amount of financing approved in the year

[2] State funds include AB94 and other appropriations for debt service

[3] Shows only debt approved in calendar year 2024; debt approved in previous calendar years for the same project not reflected in this figure

* Project approved in a closed session meeting and amount is not shown

Appendix B: Debt Assumptions

Weighted average cost of capital and average life calculations assume the following:

1. Debt service and statistics are net of Federal subsidies associated with Build America Bonds, Clean Renewable Energy Bonds, and Recovery Zone Economic Development Bonds.
2. GRB variable rate Series Z (taxable) interest is assumed at 5.00%.
3. GRB variable rate Series AL interest is assumed at current fixed payer swap rates until 2039 and 2.75% thereafter.
4. GRB variable rate Series BP interest is assumed at the associated fixed payer swap rates.
5. GRB variable rate Series BY interest is assumed at 2.75%.
6. MCPRB variable-rate Series B interest is assumed at the associated fixed payer swap rate.
7. MCPRB variable-rate Series K and Series O interest is assumed at the associated fixed payer swap rates on the hedged portions and at 2.75% on the unhedged portions.
8. Excludes FTS and Third-Party debt.

Appendix C: University Credit Ratings and Definitions

The University's Ratings/Outlooks:	Moody's	S&P	Fitch
General Revenue Bonds	Aa2/Stable	AA/Stable	AA/Stable
Limited Project Revenue Bonds	Aa3/Stable	AA-/Stable	AA-/Stable
Medical Center Pooled Rev Bonds	Aa3/Stable	AA-/Stable	AA-/Stable
Commercial Paper	P-1	A-1+	F1+

FTS and Other Third Party Debt:	Moody's	S&P	Fitch
UCR North District Phase I	Baa3/Stable	NR	NR
UCI East Campus Apartments (FTS)	Baa1/Stable	NR	NR
UCR Dundee-Glasgow	Baa3/Stable	NR	NR
UCD West Village	Baa3/Stable	NR	NR
UCD Orchard Park	Baa3/Stable	NR	NR
CIEDB UCSF Neurosciences	Aa3/Stable	AA/Stable	NR
CIEDB UCSD Sanford Consortium	Aa2/Stable	AA/Stable	NR
CIEDB UCSF 2130 Third Street	Aa3/Stable	AA/Stable	NR

Ratings are as of December 2024; NR = Not Rated

Credit Rating Definitions			
Moody's	**S&P**	**Fitch**	**Description**
Aaa	AAA	AAA	Bonds rated in this category are judged to be the highest quality.
Aa1	AA+	AA+	Bonds in the Aa/AA rating category are judged to be of high quality and standards. Together with the AAA category, bonds rated in the Aa/AA category are generally known as high grade bonds.
Aa2	AA	AA	
Aa3	AA-	AA-	
A1	A+	A+	Bonds rated in the A/A category are considered upper medium grade obligations.
A2	A	A	
A3	A-	A-	
Baa1	BBB+	BBB+	Bonds rated in the Baa/BBB category are considered medium grade obligations. They are neither highly protected nor poorly secured.
Baa2	BBB	BBB	
Baa3	BBB-	BBB-	
Ba to C	BB to C	BB to C	Bonds rated in these categories are non-investment grade/speculative.

Appendix D: Credit Opinion – Moody's Investors Service

MOODY'S INVESTORS SERVICE

CREDIT OPINION
11 January 2024

Send Your Feedback

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University of California, CA

Update to credit analysis

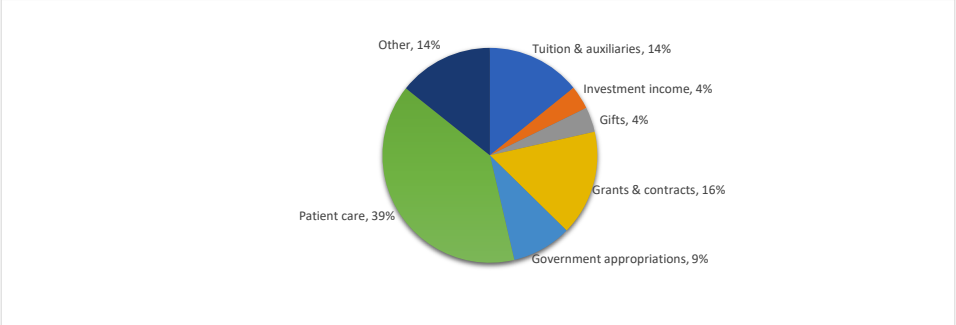
Summary

The University of California (UC, Aa2 stable) maintains an exceptional strategic position as a globally recognized comprehensive academic, medical and research institution with substantial scale and wealth. The system benefits from strong oversight and management, including good collaboration across academic campuses and medical centers, debt and capital planning, and addressing of long-term post-employment benefit liabilities. The system benefits from strong resident and non-resident student demand and, with the help of committed funding from the State of California (Aa2 negative). UC continues to benefit from the strength of its expansive research platform and well managed operations at the medical centers. Favorable revenue growth trends across UC's business lines, particularly at the medical centers, will continue to drive positive margins, strong debt service coverage and strategic investments in fiscal 2024 and beyond.

Exhibit 1

Favorable scale and revenue diversity informs UC's excellent credit quality

Fiscal 2023 sources of revenue



Source: Moody's Investors Service

Credit strengths

» Very large and highly diverse operations with $49 billion of operating revenue in fiscal 2023 and strong revenue growth

» Substantial institutional wealth of over $51 billion, including the affiliated foundations, with significant fundraising surpassing $2 billion over the last two fiscal years

» Exceptional student demand and latent tuition pricing power because of strong global brand; premier health centers providing essential healthcare services throughout the state

» Stable financial leverage despite ongoing spending and capital funding demands

» Sophisticated treasury management with well-structured internal procedures that maintain favorable liquidity at around 220 days cash on hand

Credit challenges

» Significant long-term liabilities, including pension obligations that total $59 billion on a Moody's-adjusted basis, and substantial ongoing capital needs that will be partially debt funded

» Management complexity associated with multiple disparate business lines, constituencies, and geographically distributed campuses

» Potentially overlapping budgetary vulnerabilities expose the university to shifting legislative and funding priorities on the state and federal level; political constraints limit pricing and enrollment flexibility in periods of changing fiscal conditions

» Complex debt structure including the use of various public private partnerships

Rating outlook

The stable outlook reflects Moody's expectations that the university will continue to match its capital needs with well-balanced sources of funding while maintaining a manageable leverage profile. It also incorporates general maintenance of unrestricted liquidity, state funding and continuation of surplus operations.

Factors that could lead to an upgrade

» Sustained strengthening of EBIDA to support growing leverage

» Maintain ability to identify well-balanced funding sources for, and manage the pace of, significant identified capital needs

» Continued successful execution of enterprise wide growth plans

» Maintenance of pension funding target

Factors that could lead to a downgrade

» Capital borrowing that significantly outpaces financial resource and EBIDA growth and weakens the overall leverage profile

» Sustained weakening of university-wide operating performance

» Deterioration of performance at the medical centers, a rising share of overall revenue

» Extended period of market weakness leading to sizable investment underperformance that materially impacts reserves and pension funding

» Consistently weak coverage of demand debt from self-liquidity or inability to align necessary financial resources in the event of a failed remarketing (short-term ratings)

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

UNIVERSITY OF CALIFORNIA, CA

	2019	2020	2021	2022	2023	Median: Aa Rated Public Universities
Total FTE Enrollment	268,900	272,500	272,500	272,300	n/a	32,387
Operating Revenue ($000)	36,845,441	39,074,872	39,770,975	45,705,485	48,775,412	1,374,020
Annual Change in Operating Revenue (%)	6.7	6.1	1.8	14.9	6.7	1.5
Total Cash & Investments ($000)	39,057,004	40,732,800	52,619,310	49,581,864	51,274,911	1,970,591
Total Debt ($000)	23,135,929	25,271,726	28,710,544	34,119,847	34,386,526	733,584
Total Cash & Investments to Total Adjusted Debt (x)	0.5	0.4	0.5	0.5	0.5	1.0
Total Cash & Investments to Operating Expenses (x)	1.1	1.1	1.3	1.1	1.1	1.3
Monthly Days Cash on Hand (x)	212	205	281	241	221	203
EBIDA Margin (%)	13.0	11.0	8.0	11.9	10.7	13.1
Total Debt to EBIDA (x)	4.8	5.9	9.1	6.3	6.6	3.9
Annual Debt Service Coverage (x)	4.0	3.1	1.8	2.8	3.0	3.7

Source: Moody's Investors Service

Profile

The University of California, chartered in 1868, is a public university system with 10 campuses, six medical schools and five academic medical centers. UC is the largest US public university system in terms of revenue, with $49 billion of operating revenue in fiscal 2023 and enrollment of nearly 300,000 students. UC has a significant and highly regarded research component with over $6 billion of direct expenditures in fiscal 2023. Federal and private funding accounts for three-quarters of revenues supporting these research expenditures, inclusive of UC's operation of the Lawrence Berkeley National Laboratory for the Department of Energy as well as their joint operation of two other national labs for DOE.

Detailed credit considerations

Market profile

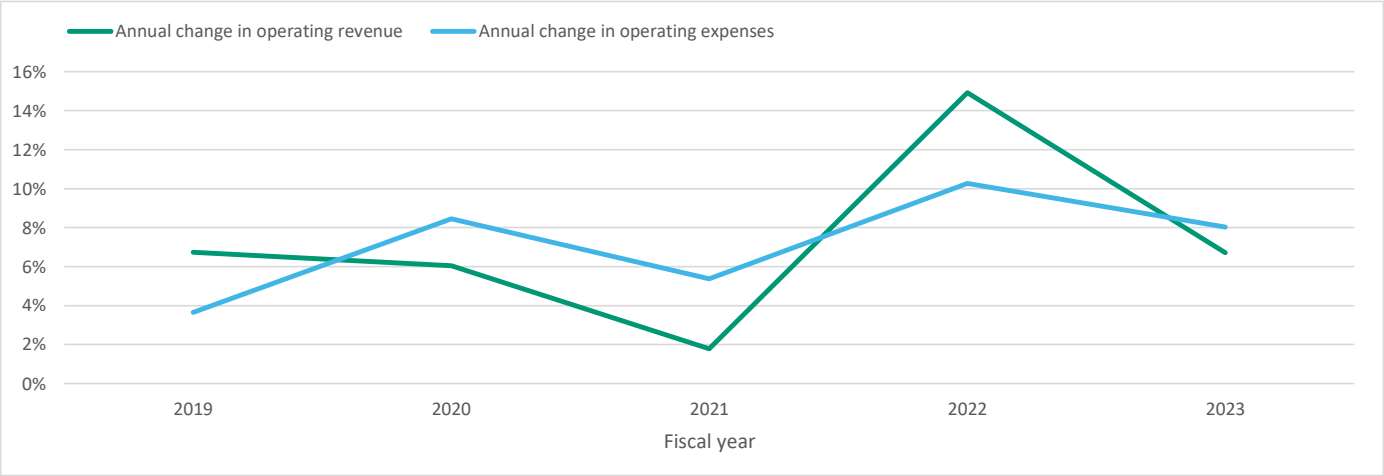
The University of California's exceptional strategic position will continue to underpin its very strong credit profile. The scale and diversity of its student base, component operations and consolidated revenue distinguishes the university within the higher education sector. Excellent resident and nonresident student demand is indicative of UC's global reputation as a leading academic and research institution. Additionally, the university serves as a critical provider of medical education and patient care within the state, as well as a major driver for innovation and economic growth.

The university's prominent research programs will continue to generate substantial funding despite increasing competition for federal dollars. Mostly federally funded, UC reported over $6 billion of research expenditures in fiscal 2023, with strong support coming from corporate and non-profit partners. Separately, UC manages three federally owned research laboratories, which helps bolster its research profile.

Patient care will continue to be an integral part of the university's budget structure, accounting for a rising share of overall operating revenue and increasing driver of overall university credit quality. At 39% of operating revenue in fiscal 2023, the university is less reliant on hospital operations than other large public universities with academic medical centers. However, at $19.2 billion in fiscal 2023, patient care revenue has grown 45% over the last five fiscal years compared to overall revenue growth of 32%. Continuing expansion of facilities and capacity will likely lead to greater healthcare exposure, as a percentage of overall revenue, over time. Credit quality will increasingly depend on UC's ability to successfully manage through an increasingly complex operating environment for healthcare.

Exhibit 3

Alignment of revenue and expense growth highlights UC's highly effective management of its complex and large scale operations



Source: Moody's Investors Service

Operating performance

UC's strong operating performance will continue to provide healthy support for its debt service obligations and capital investment needs. While UC will continue to combat expense pressures, particularly in the areas of compensation and growing capital needs, effective planning, risk management and good governmental relations will aid margin preservation. Management has a proven track record of successfully executing the university's strategies, aligning campus budgets and resources to accommodate varying operating environments. Macroeconomic headwinds and state funding priorities may consume incremental operating margin, but are unlikely to materially shift the durability of UC's operating performance over the next couple years.

The state is currently highly supportive of higher education. UC stands to benefit from a multiyear funding agreement with the state that provides the university with annual 5% base budget adjustments through fiscal 2027. The increases will fund commitments to expand student access, equity and affordability. The higher inflation environment and challenging labor market could create a mismatch between appropriations increases and agreed upon enrollment priorities. While state funding is significant, reliance on state funding continues to remain below 10%.

Robust demand and sustained revenue growth at the medical centers strongly supports university-wide annual operating results. Despite sustained macroeconomic headwinds and labor constraints, revenue across the health system remains largely intact with general maintenance of margins and debt service coverage. Liquidity remains intact, with days cash on hand similar to prior years.

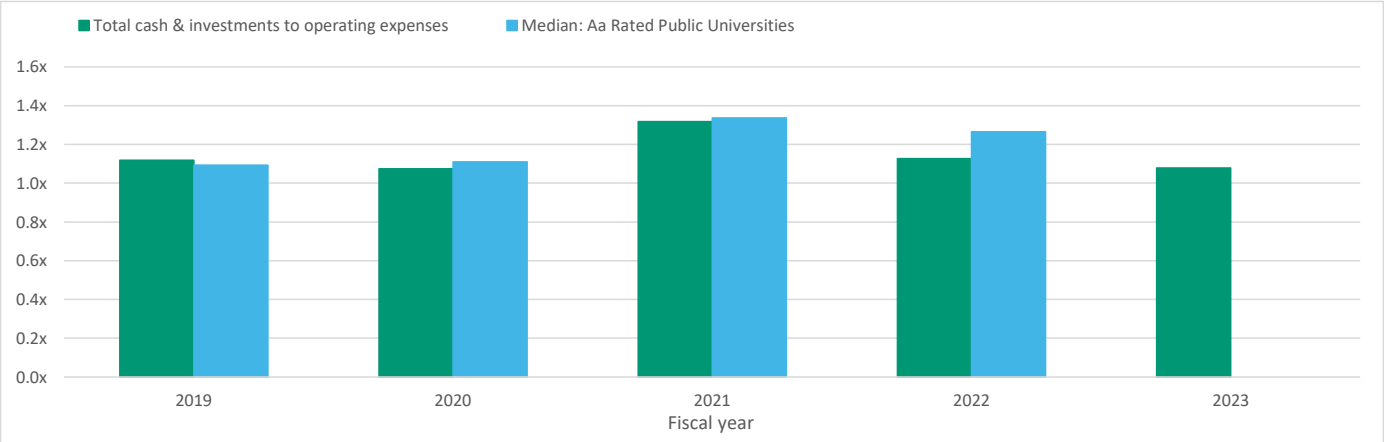
Financial resources and liquidity

UC's substantial and highly liquid wealth will continue to be a key credit strength. Strong systemwide fundraising, investment returns and EBIDA continue to facilitate growth in reserves that have largely kept pace with rising operating expenses and debt obligations. Fiscal 2023 total cash and investments of $51 billion reflects a moderate increase over fiscal 2022 levels primarily due to investment market gains and solid fundraising. UC's total gift revenue has exceeded $2 billion in fiscal years 2022 and 2023 with three-year average gifts per student of over $7,300, exceeding most flagship universities. The university has a large and sophisticated investment management group that carefully monitors liquidity and cash flow needs for the university, the medical centers and the pension plan.

Liquidity is closely managed as the university supports its $1.7 billion of outstanding daily and weekly variable rate demand debt and CP through self-liquidity. The university had $6.8 billion of Moody's discounted daily liquidity as of September 30, 2023 which, combined with $700 million of revolving credit agreements with two banks, more than sufficiently covers daily resets of demand obligations. Expanded to one month, the university holds $27 billion in liquidity, providing a sound 221 days cash on hand for the broader system.

Exhibit 4

Wealth growth keeping pace with rising expenses; aligns with similarly rated peers



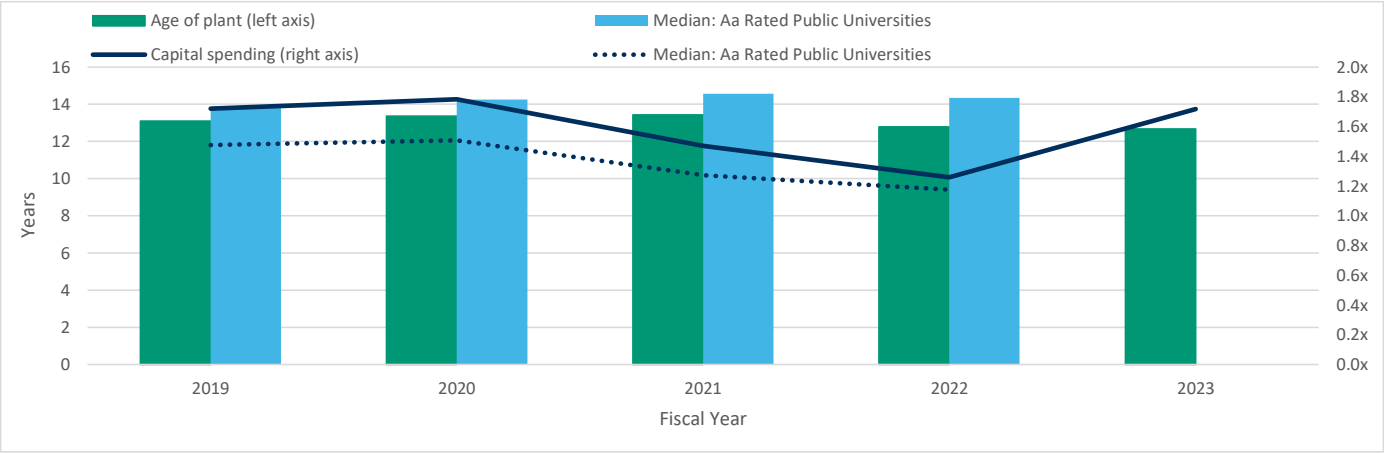
Source: Moody's Investors Service

Leverage and coverage

The university's rising debt load is manageable although UC has significant future capital plans, a large portion of which will be funded with debt. UC's Capital Financial Plan identifies $30 billion in funded capital needs through fiscal 2029. Funding sources include the use of general fund and hospital revenues, external funding from the state as well as capital financing. Much of this investment will address medical center and student housing growth, while simultaneously addressing seismic compliance needs. Debt issuance will continue to be well paced to align with budgetary and resource growth. Significant pension liabilities add substantially to total adjusted debt and are one of the university's primary credit challenges.

Exhibit 5

Significant and sustained capital investment across the system leads to a low age of plant



Source: Moody's Investors Service

UC's complex debt structure, including the use of various debt instruments, security structures, repayment modes and issuing entities, is managed through strong oversight and prudent planning. Less than 10% of the university's total debt is demand debt. The proposed 2024 Series BS, BT and BU bonds will all be fixed rate with varying amortization and maturity schedules likely through fiscal 2054. Debt service is manageable at less than 4% of operating expenses in fiscal 2023.

Pensions and OPEB

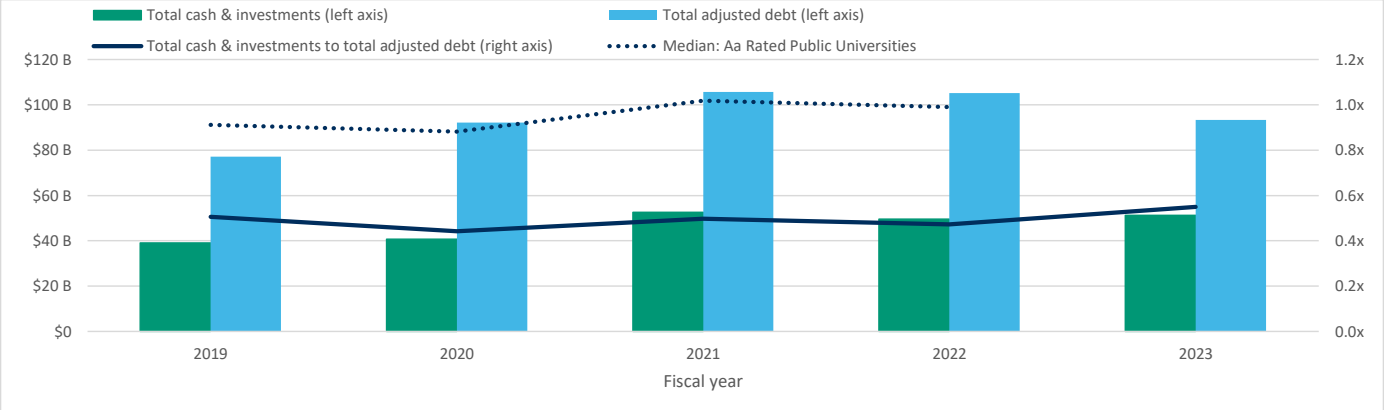
The university's unfunded pension liability represents a significant debt-like obligation and remains a key credit challenge for the university. Management continues to make positive strides toward strengthening funding levels. As of June 30, 2023, Moody's three-year Adjusted Net Pension Liability (ANPL) was $59 billion.

The Regents contribution rate was 14% in fiscal years 2023 and 2024 and will increase by 0.5% annually until fiscal 2032, bringing UC's contribution rate to 18% of payroll. The university will make annual transfers of varying amounts through fiscal 2029 to further aid the funding level, aiming to achieve 100% actuarial funding by 2048. Currently the pension plan is 64% funded on a Moody's-adjusted basis and 81% funded on an actuarial basis.

UC's retiree health benefit expense and obligations (OPEB) are similarly substantial. The university funds OPEB on a pay-as-you go basis, and as of June 30, 2023 carried a substantial total net retiree health benefit liability of approximately $22 billion. The annual funding requirements are expected to grow substantially through the medium term as the number of retirees gaining access to OPEB benefits rises.

Exhibit 6

UC's pension exposure weighs on its leverage profile relative to peers



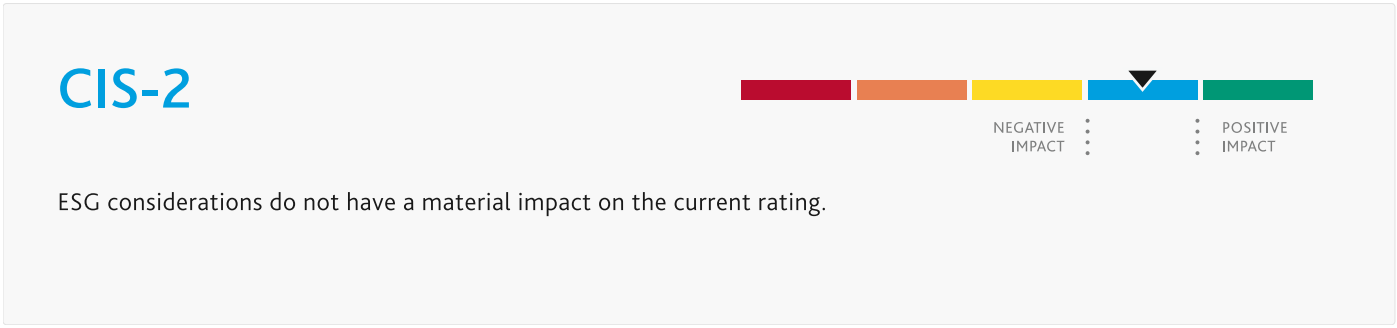
Source: Moody's Investors Service

ESG considerations

University of California, CA's ESG credit impact score is CIS-2

Exhibit 7

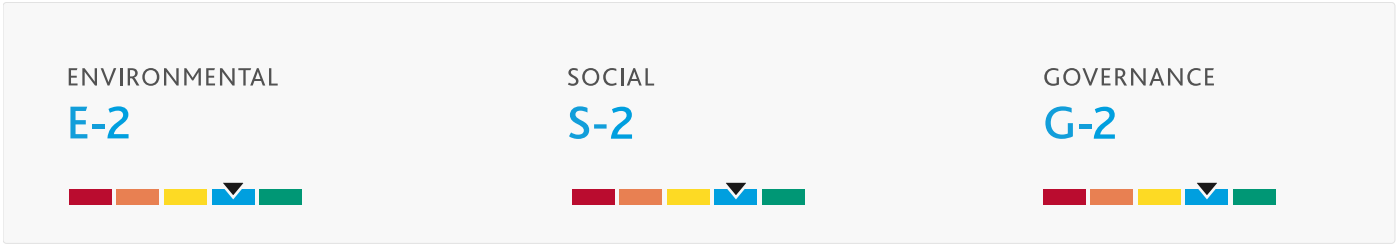
ESG credit impact score



Source: Moody's Investors Service

University of California's ESG Credit Impact Score is (**CIS-2**). The university's exceptional wealth, brand and donor support mitigate some of its risk exposures.

Exhibit 8
ESG issuer profile scores



Source: Moody's Investors Service

Environmental

UC's large network of campuses throughout the state exposes the system to various environmental risk factors (**E-2**) such as wildfires and prolonged periods of drought. However, the geographic diversity also mitigates some risks, as the system is not confined to one geographic area. The university is incorporating advanced and innovative systems within its newly constructed facilities to lower carbon and waste production and improve energy efficiencies. A systemwide sustainability focus includes various conservation measures and targeted reductions in greenhouse gas emissions to move towards carbon neutrality. An extensive annual report details progress and benchmarks towards key initiatives.

Social

UC's social risks (**S-2**) primarily include human capital challenges. UC's risk profile compares favorably to the sector, and incorporates the strength of the university's highly regarded academic, medical and research enterprises. Good customer relations with key stakeholders is supported by its favorable demand for educational and healthcare services, along with strong donor support, solid per student state funding, and expansive sponsored research activity. Its prominent educational and clinical reputation substantially mitigates demographic risks. The moderately negative human capital challenges include faculty tenure exposure, collective bargaining units and high pension liabilities, which can introduce labor rigidity, and specialized faculty and staff introducing higher labor costs. The competitive landscape for nursing and clinical staff also factors into human capital considerations. Additional social risks reside with significant and growing healthcare exposure, a reliance on government payors and the potential for issues regarding cost and access to healthcare.

Governance

UC's governance risks (**G-2**) incorporate disciplined budget and treasury management, supporting predictability in financial results, including consistently favorable operations and excellent liquidity. The demonstrated record of effective stewardship of a large, operationally complex organization with academic, healthcare, and research enterprises enhances management credibility. Detailed capital planning and debt capacity analysis contributes to maintenance of manageable debt levels and demonstrates sound financial strategy. Board structure risks are introduced by the board selection process, with 18 of 26 trustees appointed by the Governor for staggered terms of office and confirmed by the State Senate. Similar to much of US public higher education, this structure adds exposure to potential political considerations which could create misalignment with institutional priorities. However, individual board members have diverse backgrounds and areas of expertise as well as a track record of effective advocacy on behalf of the university to advance its institutional objectives.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Rating methodology and scorecard factors

The Higher Education methodology includes a scorecard that summarizes the factors that are generally most important to higher education credit profiles. Because the scorecard is a summary and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not match an assigned rating. We assess brand and strategic positioning, operating environment, and financial strategy on a qualitative basis, as described in the methodology.

Exhibit 9

University of California, CA

Scorecard Factors and Sub-factors		Value	Score
Factor 1:	**Scale (15%)**		
	Adjusted Operating Revenue (USD Million)	48,775	Aaa
Factor 2:	**Market Profile (20%)**		
	Brand and Strategic Positioning	Aaa	Aaa
	Operating Environment	Aa	Aa
Factor 3:	**Operating Performance (10%)**		
	EBIDA Margin	11%	A
Factor 4:	**Financial Resources and Liquidity (25%)**		
	Total Cash and Investments (USD Million)	51,275	Aaa
	Total Cash and Investments to Operating Expenses	1.1	Aa
Factor 5:	**Leverage and coverage (20%)**		
	Total Cash and Investments to Total Adjusted Debt	0.5	A
	Annual Debt Service Coverage	2.4	Aa
Factor 6:	**Financial Policy and Strategy (10%)**		
	Financial Policy and Strategy	Aaa	Aaa
	Scorecard-Indicated Outcome		Aa2
	Assigned Rating		Aa2

Data is based on most recent fiscal year available. Debt may include pro forma data for new debt issued or proposed to be issued after the close of the fiscal year.

For non-US issuers, nominal figures are in US dollars consistent with the Higher Education Methodology.

Fiscal 2023

Source: Moody's Investors Service

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CLIENT SERVICES

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Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Appendix E: Credit Opinion – S&P Global

S&P Global
Ratings

RatingsDirect®

University of California Board of Regents
University of California; Auxiliary - System; CP; Lease; Public Coll/Univ - Limited Student Fees; Public Coll/Univ - Unlimited Student Fees

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Credit Highlights

Outlook

Credit Opinion

Enterprise Risk Profile--Extremely Strong

Financial Risk Profile--Strong

Related Research

University of California Board of Regents University of California; Auxiliary - System; CP; Lease; Public Coll/Univ - Limited Student Fees; Public Coll/Univ - Unlimited Student Fees

Credit Profile		
US$1445.0 mil gen rev bnds (University of California) ser 2024BS dtd 02/15/2024 due 06/30/2049		
Long Term Rating	AA/Stable	New
US$200.4 mil gen rev bnds (University of California) ser 2024BT dtd 02/15/2024 due 06/30/2026		
Long Term Rating	AA/Stable	New
US$145.73 mil taxable gen rev bnds (University of California) ser 2024BU dtd 02/15/2024 due 06/30/2034		
Long Term Rating	AA/Stable	New
University of California ICR		
Long Term Rating	AA/Stable	Affirmed
University of California Board of Regents, California		
University of California, California		
University of California Brd of Regents (University of California) PCU_LSF		
Long Term Rating	AA-/Stable	Affirmed

Credit Highlights

- S&P Global Ratings assigned its 'AA' long-term rating to the University of California (UC or the system) Board of Regents' (regents) $1.4 billion series 2024 BS, $200.4 million series 2024 BT, and $145.7 million series 2024 BU general revenue bonds (GRBs).
- At the same time, we affirmed our 'AA' issuer credit rating (ICR) on UC and our 'AA' rating on the regents' GRBs outstanding.
- We affirmed our 'AA-' rating on the regents' medical center pooled revenue bonds (MCPRBs) outstanding and the regents' limited project revenue bonds (LPRBs) outstanding.
- We affirmed our 'AA/A-1+' rating on the regents' GRB variable-rate demand bonds (VRDBs) outstanding backed by UC's self-liquidity.
- We affirmed our 'AA-/A-1+' rating on the regents' MCPRB VRDBs outstanding backed by UC's self-liquidity.
- We affirmed our 'A-1+' short-term rating on the regents' commercial paper (CP) note program, which is authorized up to $2 billion and as of Nov. 30, 2023, had approximately $641 million outstanding. The short-term ratings on the VRDBs and CP are backed by UC's self-liquidity and supported by $19.1 billion in same-day discounted assets.
- The outlook, where applicable, is stable.
- All bonds were issued for the University of California.

Security

The bonds will provide up to $1.4 billion in project fund deposits and $823.7 million in refunding escrow deposits. As of fiscal year-end 2023, the system had $34.7 billion in debt outstanding for all securities, including $1.7 billion in third-party financings, $2.6 billion in leases, and $885.0 million in CP. We expect pro forma debt for the system (all securities) will be approximately $36.0 billion after these issuances. Pro forma smoothed maximum annual debt service (MADS) for all revenue bonds issued by the UC system and leases (but not including CP or the Build America Bond subsidy--and assuming amortizing principal) will be approximately $2.2 billion, or 4.4% of fiscal 2023 adjusted operating expenses, which we consider moderate and manageable. Although the system has significant additional capital plans, which will require the issuance of debt, the timing and details of such debt remain uncertain and, therefore, are not incorporated into our current analysis.

The university system's debt strategy and structure include the issuance and refinancing of debt under one of four programs rated by S&P Global Ratings:

- GRBs ('AA', with $16.4 billion outstanding as of Dec. 31, 2023): GRBs use the broadest pledge and are rated on par with the system ICR.
- LPRBs ('AA-', with $5.4 billion outstanding as of Dec. 31, 2023): The LPRBs are rated one notch below the system's GRBs due to the narrower pledge of revenues (gross revenues for the specified projects).
- MCPRBs ('AA-', with $6.9 billion outstanding as of Dec. 31, 2023): The rating is based on a lien on revenues of the system's five medical centers. S&P Global Ratings views the combined pledge of gross medical center revenues as a pledge of a strong auxiliary system of UC.
- Both the GRB and MCPRB VRDBs are supported by UC self-liquidity.
- CP ('A-1+'): The system's short-term investment pool (STIP), total return investment pool (TRIP), and $700 million hybrid lines provide liquidity support for the CP (and VRDBs). Discounted total assets with same-day liquidity availability as of Nov. 30, 2023, was $19.1 billion, which we consider ample.

Credit overview

The 'AA' rating reflects the general creditworthiness of the University of California System. We assessed UC's enterprise risk profile as extremely strong, characterized by an impressive market position and demand for its programs, and supported by a broad economic base and experienced leadership team. We assessed the system's financial risk profile as strong, characterized by solid financial resources to operations, substantial state support, and positive historical operating performance, partially offset by significant debt with additional capital and debt needs. The combination of these factors leads to an anchor of 'aa-'. As our criteria indicate, the final rating can be within one notch of the anchor. In our opinion, the 'AA' rating on the GRBs better reflects the depth and breadth of the system's operations compared with medians and with those of peers. Given the system's significant capital and debt plans over the next several years, we believe that steady improvement in financial resources will be necessary to absorb additional debt in the capital plan at the current ratings.

The 'AA' rating on the general revenue debt reflects our opinion of the system's:

- Very strong and growing demand at the 10 campuses;
- Self-supporting nature and strong financial performance of the medical centers and hospitals;

- High level of sponsored research and continued increases in private gift funding;
- Ample general endowment pool (GEP), which was $19.5 billion as of fiscal 2023; and
- Extremely strong management team with a successful history of weathering multiple business and state funding cycles.

Offsetting the above factors, in our view, are the challenges currently facing the UC system, including:

- Sizable additional capital needs,
- A moderate debt burden, and
- Adequate financial resource ratios to pro forma debt for the rating category.

Chartered in 1868, the University of California system operates 10 campuses (Berkeley; Davis; Irvine; Los Angeles, or UCLA; Merced; Riverside; San Diego; Santa Barbara; Santa Cruz; and San Francisco) and five medical centers (Davis, Irvine, Los Angeles, San Diego, and San Francisco). The system provided instruction to approximately 272,300 full-time-equivalent (FTE) undergraduate and graduate students throughout the state in fall 2022. In addition to its campuses and medical centers, UC operates three national laboratories. It is classified as an R1 Carnegie institution and reported $7.6 billion in grant revenue in 2023.

Environmental, social, and governance

We analyzed the system's social and governance risks relative to market position, management and governance, financial performance and resources, and debt and capital structure and found they are neutral within our credit analysis. We view the system as having elevated environmental risk given the campuses' locations across the state, which exposes facilities to the state's various environmental physical risks like fires and drought, as well as natural disasters like earthquakes.

Outlook

The stable outlook reflects our expectation that the system will maintain or improve its already impressive enterprise risk profile and maintain its financial resources relative to operations and debt in line with median ratios for the rating. We expect the system will produce break-even to positive margins on a full-accrual basis over the medium term. We also anticipate that the issuance of additional debt, in line with the system's capital improvement plan, will not result in any dilution of current balance sheet metrics.

Downside scenario

We would consider a negative rating action if UC experiences persistent operating losses on a full-accrual basis and issues additional debt that materially increases the system's debt burden and weakens its financial resource metrics.

Upside scenario

We would consider a positive rating action should financial resource measures, particularly to debt, improve significantly and margins remain positive.

Credit Opinion

Enterprise Risk Profile--Extremely Strong

Market position and demand

The system continues to experience strong demand for its programs, and enrollment is increasing. UC has a goal of increasing California resident enrollment by 23,000 by 2030, with a more aspirational plan if additional resources become available. In fall 2021, the university system had record headcount enrollment despite the pandemic. Enrollment in fall 2022, at 272,300 full FTEs, was relatively stable near the peak level of 272,500 FTEs, declining slightly primarily as a result of decreased summer enrollment. We view this as an impact of the pandemic, as more summer jobs were available and more students chose to work during the summer compared with the previous year. An additional contributing factor was a softening in transfer applicants. We do not view the decline as material and expect enrollment will continue to increase.

Approximately 78% of the enrollment is undergraduate students, and approximately 75% of students are California residents. Students may apply to more than one campus, and acceptance rates have traditionally varied from a highly selective 9% at UCLA and 11% at UC Berkeley to 89% at UC Merced, the system's newest campus. System tuition and fees remain moderately low, in our view, at about $13,752 for an in-state undergraduate student for 2023-2024 (excluding campus-specific fees). The UC Regents approved a plan in July 2021 to work toward a debt-free path for California resident undergraduates.

The system's fundraising efforts are decentralized, with campuses conducting their own capital campaigns and development projects. The success and history of fundraising varies by campus; however, in general, UC is an excellent fundraiser. All campuses are currently engaged in fundraising campaigns.

UC Health

The system is one of the largest health care providers in the state. It operates 20 health professional schools on seven campuses, which collectively have over 3,900 licensed beds, handled approximately 10.1 million outpatient visits, and generated more than $19 billion of medical center operating revenues in fiscal 2023. UC Health is the nation's largest health sciences instructional program, with nearly 16,000 students and trainees. UC hospitals treat the most critically ill patients in the state. The medical centers are in distinct markets that have varying dynamics. As a result, strategies are often tailored differently by market. While this is the case, management indicates that the local strategies still must support the overall system's strategic direction, and UC Health is working toward system and financial integration. Systemwide strategies include initiatives designed to evolve with the dynamic health care delivery environment in areas such as population health management, leveraging information technology, and changing reimbursement and care delivery models. In anticipation of continued industry headwinds, management continues to pursue initiatives to lower costs over the next several years. The areas of focus include an emphasis on leveraging the system's scale.

Management and governance

The system is governed by a 26-member board of regents, 18 of whom are appointed by the governor and approved by a majority vote of the state senate. Dr. Michael V. Drake became the president of the system in August 2020. Dr.

Drake has a distinguished career in higher education, most recently as the president of The Ohio State University. The system's office of UC Health provides systemwide leadership and strategic direction to the medical centers and other components of UC Health. As of October 2023, UC Health is led by David Rubin, M.D., MSCE, who reports directly to the president, as the system's executive vice president of UC Health. Each of the five medical centers has its own CEO who is subject to the oversight of the chancellor, office of the president, and regents. S&P Global Ratings considers the leadership team to be extremely strong, playing a positive role in determining the system's operational success.

The system continues to employ initiatives to identify efficiencies and reduce costs. In addition, the system is exploring options to assure the long-term quality and viability of its postemployment benefits. A debt strategy task force was formed to address the medical centers' significant capital needs and ways to fund them, which we view favorably. Systems integration and administrative efficiencies are evaluated by the system's management, which, in our opinion, is a credit strength. We note that, overall, UC is sophisticated in its financial operations, including debt and capital management, budgeting and forecasts, and centralizing expenses, which has helped maintain rating stability through the economic volatility of the past few years.

As a large and comprehensive academic institution, the system is subject to a variety of cyber risks. UC continues to take measures to protect its information technology systems against cyber attacks. Measures include improved technical security controls and vendor management processes; corrective actions in response to findings related to recent incidents; centralization of the information security function at locations; expanded scope of cyber security tools across the system; improvements in security governance, policies, and procedures; more formalized and comprehensive risk assessment processes; and improvements in implementing systemwide minimum security standards. With regard to cyber claims, UC maintains both commercial insurance and is self-insured.

Financial Risk Profile--Strong

Financial performance

Operations have been break even to positive in recent years. Operating performance on a full-accrual basis, when adjusted for noncash pension and retiree health benefit expense accrual and unrealized gains and losses, was positive, with a surplus of $590.5 million in fiscal 2023 or a net operating income of 1.2%. Fiscal 2022 was above break even, with a surplus of $475.1 million, or a 1.0% margin, an improvement from fiscal 2021's surplus or $325.0 million. We understand a number of labor contracts are expiring in each year, which likely will increase labor costs; however, we expect UC will continue to produce at least break-even margins, given its fiscal discipline.

Revenue diversity for fiscal 2023 includes:

- 36.9% health care operations;
- 17.6% student tuition/auxiliaries/fees;
- 13.8% grants and contracts; and
- 8.4% state appropriations.

State appropriations have increased in six of the past seven fiscal years. In fiscal 2023, state educational appropriations

increased the base budget by $100 million due to restoration of state support cut in prior years. Beginning in fiscal 2023, the state committed to annual 5% base budget adjustments through fiscal 2027 in exchange for commitments to expand student access, equity, and affordability. The fiscal 2024 base budget adjustment increased by 7.9%, including $346.4 million in new, ongoing funding plus $142.5 million in one-time support for programs throughout the system. The state budget also provided the system with new ongoing funds to finance new capital projects that the state had previously proposed to support with larger one-time appropriations. The regents approved the proposed 2025 budget plan and state capital funding request; the proposed budget plan is aligned with the multiyear compact.

Financial resources

Financial resources are solid for the rating category relative to expenses, but modest relative to debt. In fiscal 2023, cash and investments for both the system and blended component units (BCU) were significant, at $53.2 billion, including the $15.1 billion held at BCU. Cash and investments relative to operations in fiscal 2023 were 103.6%, as compared with the 'AA' category median of 115.3%. Cash and investments relative to pro forma debt were slimmer at 147.8%, as compared with the 'AA' category median of 278.4%.

The bulk of the system's investments are held within STIP, TRIP, and the GEP. STIP and TRIP are used as investment pools for the system's operating funds and, along with $700 million hybrid lines, are pledged toward the self-liquidity coverage of the system CP and other variable-rate debt programs. Balances as of June 30, 2023, included:

- $10.8 billion in STIP,
- $13.4 billion in TRIP,
- $19.5 billion in GEP, and
- $2.7 billion in the Blue & Gold fund.

Debt and contingent liabilities

As noted above, pro forma debt for the system is $34.7 billion. Pro forma smoothed MADS for all revenue bonds issued by the UC system and leases will be approximately $2.2 billion, or 4.4% of fiscal 2023 adjusted operating expenses, which we consider moderate and manageable.

The system has additional capital needs and approved capital funding. S&P Global Ratings will evaluate the impact of the additional debt on the system's credit quality at the time of issuance. The final details and impact of the various future projects on the system's creditworthiness remain to be seen and have not yet been incorporated into this analysis.

In addition to using a variety of security pledges, the system maintains different rates, maturities, structures, and hedges to diversify its debt portfolio, including variable-rate debt, floating-to-fixed rate swaps, and century bonds, among other strategies. In addition to funding various capital projects throughout the system, bonds have been issued for working capital and to partially fund the pension plan.

As of fiscal 2023, the system had 12 interest rate swaps with a total notional amount of $1.8 billion related to various MCPRBs and GRBs; the fair value of the swaps as of June 30, 2023, was $63.2 million. The system has collateral posting requirements for six of the swaps if ratings fall below 'A'. S&P Global Ratings believes the swaps represent

low-to-moderate risk at this time due to the ratings on the counterparties and the moderate economic viability during stressful economic cycles.

Most system employees participate in the University of California Retirement System (UCRS), which consists of the University of California Retirement Plan, a defined-benefit plan; the University of California Retirement Savings Program, a defined-contribution plan; the University of California Voluntary Early Retirement Incentive Program, a defined-benefit plan; and the Children's Hospital & Research Center at Oakland plan, a defined-benefit plan. Administration authority for the UCRS plans is vested with the president of the system as plan administrator.

Since it restarted annual employer and employee contributions to its pension plan in April 2010, the system has taken steps to address its pension and retiree health obligations, including introducing new employee UC retirement plan (UCRP) tiers in 2013 and 2016, transferring approximately $7 billion to pay a portion of the unfunded liability, and increasing contribution rates. UC transferred $700 million to the STIP in fiscal 2022 and $500 million for fiscal years 2023 and 2024. The system also implemented a new retirement program for employees hired on or after July 1, 2016, that includes a modified salary cap for its defined-benefit plan and a new defined-contribution plan option, among other features. Strong investment returns have also helped the plan's assets increase over time. As of June 30, 2021, the net pension liability for UCRP decreased to $5.9 billion, primarily spurred by higher-than-expected investment returns. However, these gains were reversed in fiscal 2022 as a result of market declines, and the net pension liability increased to $21.3 billion (on a market value basis). In fiscal 2023, the net pension liability decreased slightly to $20.4 billion. Under the system's recently approved funding strategy, the retirement system is projected to be 100% funded by 2048. We consider management's focus on addressing the issue to be a credit positive.

University of California, California--enterprise and financial statistics

	--Fiscal year ended June 30--					Medians for 'AA' category rated public colleges and universities
	2023	2022	2021	2020	2019	2022
Enrollment and demand						
Full-time-equivalent enrollment	272,300	272,500	272,500	268,900	264,500	41,783
Undergraduates as a % of total enrollment	81.6	81.5	82.3	81.9	81.9	80.2
First-year acceptance rate (%)	59.3	64.6	68.6	61.0	59.0	73.2
First-year matriculation rate (%)	38.8	39.3	39.5	42.7	43.5	27.0
First-year retention rate (%)	91.7	92.2	92.6	92.8	92.5	86.8
Six-year graduation rate (%)	86.1	86.3	85.6	85.3	84.2	71.0
Income statement						
Adjusted operating revenue ($000s)	51,984,626	48,493,662	42,656,775	41,733,922	39,936,717	2,148,374
Adjusted operating expense ($000s)	51,394,117	48,008,450	42,331,783	41,679,328	39,579,409	2,030,534
Net adjusted operating margin (%)	1.1	1.0	0.8	0.1	0.9	3.2
Estimated operating gain/loss before depreciation ($000s)	3,420,207	3,180,087	2,948,250	2,239,025	2,457,536	MNR
Tuition discount (%)	24.4	24.2	22.3	22.0	22.3	28.2

University of California, California--enterprise and financial statistics (cont.)

	--Fiscal year ended June 30--					Medians for 'AA' category rated public colleges and universities
	2023	2022	2021	2020	2019	2022
Student dependence (%)	17.6	18.2	16.9	19.7	21.0	37.0
State appropriations to revenue (%)	8.4	8.9	7.6	8.8	8.8	17.3
Health care operations dependence (%)	36.9	36.0	36.7	34.0	33.1	MNR
Research dependence (%)	13.8	13.7	13.7	14.1	14.1	13.4
Debt						
Foundation debt ($000s)	N.A.	N.A.	N.A.	N.A.	N.A.	MNR
Total debt with foundation ($000s)	34,670,960	34,238,806	30,651,201	25,446,607	23,286,588	1,142,825
Proposed debt ($000s)	2,184,005	4,957,070	4,108,980	5,668,225	3,311,502	MNR
Total pro forma debt ($000s)	36,031,230	34,665,671	N.A.	N.A.	N.A.	MNR
Current debt service burden (%)	4.8	4.8	4.3	3.4	3.4	MNR
Current MADS burden (%)	4.2	4.2	4.8	3.6	3.7	3.4
Pro forma MADS burden (%)	4.4	4.6	N.A.	N.A.	N.A.	MNR
Average age of plant (years)	12.7	12.4	12.1	13.4	13.1	13.5
Financial resource ratios						
Endowment market value ($000s)	22,214,733	19,506,375	19,885,582	14,990,353	14,298,541	1,102,535
Related foundation market value ($000s)	16,304,969	14,609,453	14,760,291	11,089,311	10,441,887	945,352
Cash and investments including foundation ($000s)	53,256,110	52,271,282	53,373,340	41,177,065	39,291,142	2,837,567
Cash and investments including foundation to operations (%)	103.6	108.9	126.1	98.8	99.3	115.3
Cash and investments including foundation to debt (%)	153.6	152.7	174.1	161.8	168.7	278.4
Cash and investments including foundation to pro forma debt (%)	147.8	150.8	N.A.	N.A.	N.A.	MNR

Total adjusted operating revenue = unrestricted revenue less realized and unrealized gains/losses and financial aid. Total adjusted operating expense = unrestricted expense plus financial aid expense. Net operating margin = 100*(net adjusted operating income/adjusted operating expense). Student dependence = 100*(gross tuition revenue + auxiliary revenue) / adjusted operating revenue. Current MADS burden = 100*(maximum annual debt service expense/adjusted operating expenses). Cash and investments = cash + short-term and long-term investments. Average age of plant = accumulated depreciation/depreciation and amortization expense. N.A.--Not available. MNR--Median not reported. MADS--Maximum annual debt service.

Related Research

Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Ratings Detail (As Of January 12, 2024)

California Infrastructure & Economic Development Bank, California

University of California, California

Ratings Detail (As Of January 12, 2024) (cont.)

California Infrastructure & Econ Dev Bnk (University of California) LEASE		
Long Term Rating	AA/Stable	Affirmed
California Infrastructure & Econ Dev Bnk (University of California) LEASE		
Long Term Rating	AA/Stable	Affirmed
California Infrastructure & Econ Dev Bnk (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
California Infrastructure & Econ Dev Bnk (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
California Statewide Communities Development Authority, California		
University of California, California		
California Statewide Communities Dev Auth (University of California) RZEDBs		
Long Term Rating	AA/Stable	Affirmed
University of California Board of Regents, California		
University of California, California		
University of California Board of Regents (University of California) gen rev bnds (var rate) (University of California) ser 2023BP1&2 dtd 02/22/2023 d		
Long Term Rating	AA/A-1+/Stable	Affirmed
University of California Board of Regents (University of California) taxable gen rev bnds		
Long Term Rating	AA/Stable	Affirmed
University of California Board of Regents (University of California) tax exempt gen rev bnds		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) gen rev bnds		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) gen rev bnds (University of California) ser 2023BN		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) AUXSYSTEM		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) AUXSYSTEM		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) AUXSYSTEM		
Long Term Rating	AA-/A-1+	Affirmed
University of California Brd of Regents (University of California) CP		
Short Term Rating	A-1+	Affirmed
University of California Brd of Regents (University of California) PCU_LSF		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_LSF		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_LSF		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_LSF		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		

Ratings Detail (As Of January 12, 2024) (cont.)

Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/A-1+/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
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Long Term Rating	AA/Stable	Affirmed
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Long Term Rating	AA/Stable	Affirmed
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Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA-/A-1+/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		

Ratings Detail (As Of January 12, 2024) (cont.)

Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA-/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF		
Long Term Rating	AA/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF (ser 2005G wrap of insured) (FGIC & BHAC) (SEC MKT)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
University of California Brd of Regents (University of California) PCU_USF (BAM) (SECMKT)		
Unenhanced Rating	AA-(SPUR)/Stable	Affirmed

Many issues are enhanced by bond insurance.

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Appendix F: Credit Opinion – Fitch Ratings

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FitchRatings

University of California

The 'AA' IDR reflects the UC system's growing enrollment and very strong student demand characteristics, consistently solid national/international reputation, steady operating performance inclusive of a sizeable and accretive health system, continued support from the state of California (IDR, AA/Stable) and expectations of financial flexibility and manageable leverage as UC navigates its sizable capital improvement program. The 'AA' rating on the GRBs reflects the support of UC's broad revenue pledge of unencumbered system revenues.

The Stable Outlook reflects an expectation that UC's operating performance will remain steady at a level to bolster its financial flexibility through an increase in debt in support of a robust capital improvement plan. UC continues to position itself for increasing in-state and residential enrollment growth, and the current transaction will provide project funds to address ongoing campus housing needs, as well as other key projects, across the system.

The 'AA-' ratings on the MCPRBs and LPRBs reflect narrower revenue pledges on certain medical center and project-related revenues, respectively, securing these bonds. The short-term 'F1+' rating reflects the long-term credit quality of UC, as well as its substantial liquid resources in support of self-liquidity obligations.

New Issue Summary

The 2024 series BS bonds are expected to be fixed rate, tax exempt, and with proceeds used to refund certain outstanding bonds, fund capital expenditures and to pay related costs of issuance. The 2024 series BT bonds are expected to be fixed-rate, tax-exempt and will be used to fund a capital acquisition on its San Diego health campus and to pay related costs of issuance. The series 2024 Series BU bonds are expected to be taxable, and used to fund certain capital expenditures and pay related costs of issuance. UC expects to net at least $815 million in new money proceeds from the issuances. The bonds are expected to be sold via negotiation the week of Jan. 22, 2024.

Security

UC's GRBs are secured by a broad pledge of UC's unencumbered revenues, namely gross tuition and fees, indirect cost recovery revenues, auxiliary receipts and a portion of state general fund appropriations. MCPRBs are secured by the gross revenues derived from the operation of UC's five medical centers. LPRBs are secured by a lien on the gross revenues of LPRB-financed projects, subordinate to debt service on GRBs. Pledged security for the LPRBs also includes other revenues as designated by the regents for payment of principal and interest.

Rating

Long-Term IDR	AA
Outlooks	
Long-Term IDR	Stable

New Issue

$1,387,000 Regents of the University of California (The) (CA) General Revenue Bonds (Taxable), Series 2024BS	AA
$200,440,000 Regents of the University of California (The) (CA) General Revenue bonds, Series 2023BT	AA
$145,730,000 Regents of the University of California (The) (CA) General Revenue Bonds, Series 2023BU (Taxable)	AA

Sale Date

Week of January 22, 2023

Outstanding Debt

Regents of the University of California (The) (CA) General Revenue Bonds	AA/F1+
Regents of the University of California (The) (CA) med Center Pooled Revenue Bonds	AA-/F1+
Regents of the University of California (The) (CA) Limited Project Revenue Bonds	AA-
California Statewide Communities Development Authority (UC Merced Student Housing Phase 4) Revenue Bonds (Recovery Zone Economic Development Bonds)	AA
Regents of the University of California (The) (CA) Commercial Paper Notes	F1+

Applicable Criteria

Public Sector, Revenue-Supported Entities Rating Criteria — Effective from April 27, 2023 to January 12, 2024

U.S. Public Finance College and University Rating Criteria (September 2023)

Related Research

Fitch Rates the University of California's 2024 GRBs 'AA'; Affirms Outstanding; Outlook Stable (January 2024)

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Key Rating Drivers

Revenue Defensibility — 'aa'

Leading Public Research System; Sustained State Support

Fitch's 'aa' assessment of UC's revenue defensibility reflects the system's very strong demand characteristics, as well as a sizable and accretive clinical enterprise and an expectation of consistent and strong state operating support. For fall 2023 preliminary enrollment was steady yoy, and overall continues to reflect a long-term strategy to increase resident undergraduate enrollment. The enrollment pipeline remains healthy, with consistent demand characteristics. UC's revenue mix is wide, with student fee revenue, state appropriations, and healthcare contributing about 15%, 9% and 38%, respectively, to total operating revenues in fiscal 2023. In addition, UC has a robust research enterprise with over $7.6 billion in research awards in 2023.

Operating Risk — 'a'

Solid Cash Flow at System and Healthcare Enterprise, and Meaningful but Manageable Capital Plans

Solid cost flexibility and consistent cash flow margins are reflected in Fitch's 'a' assessment of UC's operating risk, based on systemwide performance indicators. Through 2023, UC generated sufficient cash flow and coverage (adjusted for pension/other post-employment benefits) of about 8.7% and 2.4x, respectively. Margins are somewhat exposed to wage and inflationary pressures, reflecting UC's sizeable pension obligation and union presence, and remain a key consideration in light of the system's sizeable capital plans.

Financial Profile — 'aa'

Sizable and Resilient Financial Profile

UC maintains a strong financial position, with generally improving available funds (AF) relative to expenses and adjusted debt over time. Its total system leverage (AF/adjusted debt) was 69.8% in fiscal 2023, and AF of $47 billion equaled nearly 90% of expenses. Bonded debt totaled about $30 billion at FYE 2023, and Fitch's adjusted debt metrics also include sizeable debt equivalents of about $31 billion, related to the system's defined benefit pension obligation and about $2.6 billion in lease obligations. UC's reported net pension liability equaled $20.4 billion as of June 30, 2023; pension obligations were 81% funded at FYE, which, when adjusted per Fitch's criteria, equated to a funding level of about 74% as of fiscal 2023.

Asymmetric Additional Risk Considerations

No asymmetric additional risk considerations affected the ratings.

Rating Sensitivities

Factors, actions or events that may, individually or collectively, lead to negative rating action include:

- Sustained erosion in systemwide operating performance with cash flow margins normalizing at a level consistently below 6% over the next few years;
- Unexpected and prolonged pressure on state support of operating, capital or strategic plans, as indicated by reductions in annual ongoing support levels that persist over several years.

Factors, actions or events that may, individually or collectively, lead to positive rating action include:

- Resiliency in demand and strengthening operating performance across the system with consolidated cash flow sustained around 12% or better over time.
- Successful completion of seismic-required and other strategic capital projects across the enterprise while maintaining leverage (AF/adjusted debt) sustainably around 80% or better.

Credit Profile

Chartered in 1868, UC is a comprehensive public research university with 10 campuses located throughout California in Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, Santa Barbara and Santa Cruz, as well as a graduate campus in San Francisco for health sciences. UC also has five academic medical centers (including 12 hospitals) in connection with its six medical schools and other health science disciplines, four law schools and a statewide agricultural and natural resources division.

In addition, UC maintains a sizeable research complement, operating and managing a national laboratory under direct federal contract and is a member in joint ventures operating and managing two other national laboratories for the Department of Energy. The UC system benefits from an exceptional global academic reputation, which drives strong

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student demand and selective admissions. Fall 2023 enrollment is not yet finalized, but is expected to be relatively comparable against fall 2022 headcount enrollment of approximately 294,200 students.

Revenue Defensibility

UC remains focused on expanding in-state access, through systemwide growth as well as targeted increases at its highly sought-after Berkeley, Los Angeles, and San Diego campuses. Selectivity, matriculation and retention levels have remained solid and are reflective of UC's role as the state's land-grant research institution system.

State operating support is expected to remain favorable in light of the continued funding support for in-state student access, scholarship, and enrollment growth goals. The 2023-2024 state appropriation of $4.86 billion included a 7.9% increase in ongoing new funding (inclusive of a 5% increase in the base budget), as well as $142.5 million in one-time operating and capital funding. The recently proposed 2024-25 state budget remains in line with the multi-year compact, which Fitch views as indicative of continued strong state support.

In addition, UC's revenue mix includes an accretive and sizeable (38.3% of fiscal 2023 revenues) healthcare system, which continues to yield solid revenue growth and accretive margins in fiscal 2023. The healthcare system saw meaningful inpatient and outpatient utilization growth, generated a reported 14% in EBIDA and 4.8x in debt service coverage, and maintained a reported 142 DCOH during fiscal 2023.

Operating Risk

Systemwide efforts on operating efficiency, collaboration across campuses and medical centers, and meaningful growth in revenue against expenses helped to preserve operating performance through the worst of the pandemic and have been critical to absorb the currently outsized labor and expense pressures in the prior and current year. Capital considerations are meaningful as UC continues to address its required seismic regulation projects by 2030, as well as its student housing and other related capital needs necessary to absorb enrollment growth targets and accompanying housing needs. Additional debt is expected as one of many funding sources, which Fitch believes can be absorbed at the current rating level.

Financial Profile

The additional debt in this transaction (which includes up to $815 million in project proceeds) can be absorbed at the 'aa' assessment level. Absolute debt levels will continue to increase with this issuance and additional issuance that is likely over the next few years, but leverage is expected to remain within a tolerable range for the 'aa' financial profile assessment due to continued and commensurate growth in revenue, cash flow, and financial resources.

The 'F1+' rating reflects UC's long-term credit quality, as well as its capable treasury function and sizeable level of financial resources. UC's $700 million in revolving credit agreements and about $19 billion in working capital (STIP and TRIP) provide sufficient self-liquidity against its $1.39 billion of outstanding daily and weekly variable rate demand debt (as of Aug. 4, 2023) and ($2 billion max authorization) CP program.

ESG Considerations

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit https://www.fitchratings.com/topics/esg/products#esg-relevance-scores.

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Demand Summary

(Fall Semester of Fiscal Years Ended June 30)	2020	2021	2022	2023
Enrollment				
Headcount - Total Undergraduate	226,121	226,449	230,529	230,407
Headcount - Total Graduate	58,945	59,267	64,007	63,798
Total Headcount Enrollment	**285,066**	**285,716**	**294,536**	**294,205**
Total Undergraduate / Total Headcount Enrollment (%)	79.3	79.3	78.3	78.3
Total FTE Enrollment	**285,227**	**291,959**	**272,891**	**272,527**
5-Year FTE Enrollment CAGR (%)	2.7	2.9	0.7	0.0
Admissions				
Freshman Applications	176,716	172,308	203,842	211,010
Freshman Admissions	107,668	118,242	131,662	125,233
Acceptance Rate (%)	*60.9*	*68.6*	*64.6*	*59.4*
Freshman Matriculants	45,951	46,709	51,727	48,588
Matriculation Rate (%)	*42.7*	*39.5*	*39.3*	*38.8*
Transfer Applications	41,268	43,236	46,313	40,688
Transfer Admissions	28,528	30,067	30,660	27,674
Acceptance Rate (%)	*69.1*	*69.5*	*66.2*	*68.0*
Transfer Matriculants	20,856	21,745	21,509	19,561
Matriculation Rate (%)	*73.1*	*72.3*	*70.2*	*70.7*
Graduate Applications	41,501	43,478	43,470	44,612
Graduate Admissions	11,107	13,018	13,964	12,326
Acceptance Rate (%)	*26.8*	*29.9*	*32.1*	*27.6*
Graduate Matriculants	4,269	3,359	5,240	4,488
Matriculation Rate (%)	*38.4*	*25.8*	*37.5*	*36.4*
Student Demand Data				
In-State Undergraduate Student (%)	82.1	82.8	82.1	82.5
Out-of-State Undergraduate Student (%)	17.9	17.2	17.9	17.5
Freshmen to Sophomore Year Retention Rate (%)	93.0	92.7	92.1	91.7
Six Year Graduation Rate (%)	86.3	86.1	86.4	86.1
Annual Undergraduate Cost of Attendance $				
Tuition	11,442	11,442	11,442	11,928
Mandatory Fees	1,128	1,128	1,128	1,176
Total	**12,570**	**12,570**	**12,570**	**13,104**

Source: Fitch Ratings, Fitch Solutions, University of California (CA)

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Financial Ratios

(Audited Fiscal Years Ended June 30)	2020	2021	2022	2023
Revenue Diversity (% Operating Revenues)				
Tuition	13.2	12.4	11.7	11.0
Student Fees (Tuition & Auxiliary Revenues)	16.7	14.0	15.2	14.7
Total Grants & Contracts	16.7	16.8	16.2	16.2
State Appropriations	9.2	8.0	9.2	8.8
Healthcare Operations	35.2	38.1	37.6	38.3
Gifts & Contributions	3.8	3.8	3.7	3.7
Total Investment Return	1.0	1.2	0.5	2.0
Expense Ratios (% Operating Expenses)				
Instruction	20.4	19.3	19.1	19.3
Research	12.4	12.3	12.4	12.2
Healthcare Operations	32.6	33.9	33.7	34.8
Operation & Maintenance of Plant	1.7	1.7	1.9	2.2
Depreciation	4.9	5.5	5.4	5.4
Interest	2.1	2.4	2.3	2.2
Financial Aid Ratios				
Tuition Discounting (%)	22.0	22.3	24.2	24.4
Net Tuition & Fees	5,298,018	5,100,747	5,440,530	5,514,899
Change in Net Tuition & Fees(%)	2.5	-3.7	6.7	1.4
Net Tuition Revenue / FTE	18,575	17,471	19,937	20,316
Change in Net Tuition Revenue / FTE (%)	0.3	-5.9	14.1	1.9
5-Year Net Tuition Revenue per FTE Enrollment CAGR (%)	4.2	1.4	3.3	2.7
Operating Performance Ratios (%)				
Adjusted Operating Margin	-10.2	-2.9	-4.2	-4.6
Cash Flow Margin - Adjusted	7.8	8.4	9.0	8.7
Capital Expenditures as % of Depreciation	178.4	147.1	125.9	145.4
Average Age of Plant (Years)	13.4	13.4	12.8	12.7
Balance Sheet Ratios (%)				
Available Funds / Total Operating Expense	80.9	109.4	96.3	89.9
Available Funds / Total Long Term Debt (New)	134.6	141.1	131.0	130.1
Available Funds / Adjusted Debt	60.2	95.4	69.6	69.9
Available Funds / MADS (x)	15.5	20.0	19.8	17.2
Debt Ratios				
Current Debt Service Coverage (x)	2.2	1.8	2.0	2.4
Current Debt Burden (%)	3.5	4.4	4.2	3.6
Pro Forma MADS Coverage (x)	1.4	1.4	1.6	1.6
Pro Forma MADS Burden (%)	5.8	5.6	5.1	5.5
Variable Rate Bonds as % of Total Bonds	4.4	3.7	3.4	4.4
Hedged Variable Rate Bonds as % of Total Bonds	4.4	3.7	3.4	4.4

Note: Fitch may have reclassified certain financial statement items for analytical purposes.
Source: Fitch Ratings, Fitch Solutions, University of California (CA)

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Financial Summary

($000, Audited Fiscal Years Ended June 30)	2020	2021	2022	2023
Balance Sheet - Assets				
Cash & Cash Equivalents	355,748	678,069	1,080,765	549,988
Investments	31,475,750	38,448,400	39,503,401	39,523,293
Total Cash & Investments	**31,831,498**	**39,126,469**	**40,584,166**	**40,073,281**
Property, Plant & Equipment, Gross	65,742,940	69,140,604	75,290,181	79,807,592
Less: Accumulated Depreciation	29,199,768	31,144,125	33,614,741	36,003,685
Property, Plant & Equipment, Net	**36,543,172**	**37,996,479**	**41,675,440**	**43,803,907**
Balance Sheet - Liabilities & Net Assets				
Fixed Rate Bonds Payable	21,317,356	25,627,823	28,087,202	28,308,595
Hedged Variable Rate Bonds Payable	987,270	983,410	979,415	1,316,285
Total Bonds Payable	**22,304,626**	**26,611,233**	**29,066,617**	**29,624,880**
Capitalized Leases	186,427	145,654	80,868	62,244
Commercial Paper	1,327,000	370,000	945,000	885,000
Operating Lease Liabilities	0	2,519,570	2,387,704	2,568,717
Total Other Obligations	**5,985,164**	**8,019,115**	**9,865,290**	**9,901,264**
Total Long -Term Debt	**26,652,748**	**32,743,646**	**35,641,317**	**36,159,709**
Operating Lease Expense	371,900	0	0	0
Fitch Adjusted Net Pension Liability (NPL, UAAL)	31,034,644	15,668,261	31,486,446	31,169,910
Debt Equivalents	**32,894,144**	**15,668,261**	**31,486,446**	**31,169,910**
Adjusted Debt	**59,546,892**	**48,411,907**	**67,127,763**	**67,329,619**
Unfunded Capital Commitments	2,472,506	2,354,958	2,368,223	1,940,285
Unrestricted Net Assets	-24,593,173	-21,163,855	-24,186,920	-26,782,482
Invested In Capital	14,443,373	13,848,413	11,804,936	13,777,714
Restricted Net Assets - Non-Expendable (Fitch-Adjusted)	1,263,654	1,284,611	1,307,202	1,336,243
Restricted Net Assets - Expendable (Fitch-Adjusted)	8,769,641	10,960,926	11,526,450	11,639,236
Total Net Assets	**-116,505**	**4,930,095**	**451,668**	**-29,289**
Balance Sheet - Resources & Liquidity				
Available Funds (AF)	30,567,844	37,841,858	39,276,964	38,737,038
Foundation Available Funds	5,297,559	8,354,354	7,421,616	8,289,570
Total Available Funds (University & Foundation)	**35,865,403**	**46,196,212**	**46,698,580**	**47,026,608**
Statement of Cash Flows				
Depreciation	2,184,431	2,320,064	2,626,612	2,829,698
Net Cash Generated (Used) in Operating Activities	-2,208,979	-3,373,528	-4,046,534	-5,897,300
Additions of PP&E/Capital Assets	3,896,294	3,413,213	3,306,809	4,115,155
Payments on Bonds Payable	485,776	780,891	852,590	1,013,537
Cash Paid for Interest	933,246	1,023,713	1,103,478	1,147,279
Pension Plans				
Total Pension Liability (TPL, AAL)	93,296,612	98,381,361	103,314,072	109,257,286
Fiduciary Net Position (FNP, AVA)	71,517,491	92,486,409	81,966,269	88,886,630
Fitch Adjusted Total Pension Liability (TPL, AAL)	102,515,463	108,101,319	113,408,646	120,005,859
Fitch Adjusted Net Pension Liability (NPL, UAAL)	31,034,644	15,668,261	31,486,446	31,169,910
Fitch Adjusted Ratio of Assets to Liabilities (FNP/TPL, AVA/AAL) (%)	69.8	85.6	72.3	74.1
Add: Pension Expense	5,355,166	2,041,008	4,337,794	4,891,821
Less: Pension Contributions	2,475,225	2,736,810	2,930,073	2,811,874
Total Pension Service Cost	2,479,145	2,579,007	2,603,969	2,767,669

Note: Fitch may have reclassified certain financial statement items for analytical purposes.
Source: Fitch Ratings, Fitch Solutions, University of California (CA)

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Financial Summary

($000, Audited Fiscal Years Ended June 30)	2020	2021	2022	2023
Operating Revenues				
Gross Tuition & Fees	6,790,949	6,564,698	7,176,133	7,298,558
Less: Student Aid	1,492,931	1,463,951	1,735,603	1,783,659
Net Tuition & Fees ($000)	**5,298,018**	**5,100,747**	**5,440,530**	**5,514,899**
Sales & Services of Auxiliary Enterprises	1,415,158	656,282	1,646,591	1,850,937
Federal Grants & Contracts	4,150,907	4,188,723	4,493,272	4,834,722
State / Local Grants & Contracts	955,687	991,685	1,216,087	1,284,756
Other Grants & Contracts	1,608,449	1,699,115	1,829,799	1,984,963
State Appropriations	3,686,105	3,260,441	4,296,909	4,387,338
Healthcare Operations	14,169,528	15,639,398	17,466,956	19,160,460
Gifts & Contributions	1,516,475	1,571,402	1,736,613	1,825,635
Dividend & Interest Income	385,310	502,846	251,506	1,005,957
Other Material (10%) Operating Revenue	683,593	880,119	843,341	127,874
All Other Operating Revenues	6,358,208	6,532,526	7,286,095	8,061,352
Total Operating Revenue	**40,227,438**	**41,023,284**	**46,507,699**	**50,038,893**
Adjusted Total Operating Revenue	**40,227,438**	**41,023,284**	**46,507,699**	**50,038,893**
Operating Expenses				
Instruction	9,042,366	8,126,839	9,247,472	10,078,087
Academic Support	3,699,479	3,396,245	3,644,864	3,901,644
Institutional Support	1,929,186	1,897,211	2,530,862	2,013,577
Student Services	1,365,576	1,205,324	1,404,110	1,598,149
Public Service	829,864	787,475	915,903	1,029,124
Research	5,492,011	5,194,750	6,011,775	6,372,538
Auxiliary Enterprises	1,408,764	1,044,381	1,458,613	1,792,990
Student Aid	1,018,510	1,097,227	1,161,776	864,179
Healthcare Operations	14,438,685	14,306,403	16,337,439	18,218,096
Operation & Maintenance of Plant	770,489	726,874	897,983	1,141,966
Depreciation	2,184,431	2,320,064	2,626,612	2,829,698
Interest Expense	921,796	990,646	1,126,368	1,158,643
All Other Operating Expenses	1,226,045	1,120,987	1,116,050	1,328,896
Total Operating Expense	**44,327,202**	**42,214,426**	**48,479,827**	**52,327,587**
Adjusted Change in Net Assets from Operations	**-4,099,764**	**-1,191,142**	**-1,972,128**	**-2,288,694**
Non-Operating Revenues/(Expenses)				
Realized & Unrealized Gain (Loss) on Investments	406,198	5,842,705	-3,148,849	1,218,317
Additions to Permanent Endowment	32,508	29,294	30,537	30,416
Capital Appropriations	-654	248	1,182	105,328
Capital Grants & Gifts	251,616	228,422	311,160	339,658
Other Non-Operating Revenues (Expenses)	-35,498	137,073	380,160	103,863
Total Non-Operating Revenue (Expense)	**654,170**	**6,237,742**	**-2,425,810**	**1,797,582**
Change in Net Assets	**-3,445,594**	**5,046,600**	**-4,397,938**	**-491,112**

Note: Fitch may have reclassified certain financial statement items for analytical purposes.
Source: Fitch Ratings, Fitch Solutions, University of California (CA)

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Cash Flow Margin

($000, Audited Fiscal Years Ended June 30)	2020	2021	2022	2023
Adjusted Change in Net Assets from Operations	-4,099,764	-1,191,142	-1,972,128	-2,288,694
Add: Interest Expense	921,796	990,646	1,126,368	1,158,643
Add: Pension Expense	5,355,166	2,041,008	4,337,794	4,891,821
Add: Depreciation Expense	2,184,431	2,320,064	2,626,612	2,829,698
Less: Pension Contributions	2,475,225	2,736,810	2,930,073	2,811,874
Add: Non-Cash OPEB Expenses	1,247,963	1,862,855	660,942	506,257
Cash Flow	**3,134,367**	**3,286,621**	**3,849,515**	**4,285,851**
Adjusted Change in Net Assets from Operations	-4,099,764	-1,191,142	-1,972,128	-2,288,694
Add: Interest Expense	921,796	990,646	1,126,368	1,158,643
Add: Pension Expense	5,355,166	2,041,008	4,337,794	4,891,821
Add: Depreciation Expense	2,184,431	2,320,064	2,626,612	2,829,698
Total Pension Service Cost	2,479,145	2,579,007	2,603,969	2,767,669
Add: Non-Cash OPEB Expenses	1,247,963	1,862,855	660,942	506,257
Cash Flow - Adjusted	**3,130,447**	**3,444,424**	**4,175,619**	**4,330,056**
Current Debt Service	1,419,022	1,804,604	1,956,068	1,819,847
Pro Forma Maximum Annual Debt Service (MADS)	2,313,942	2,313,942	2,353,707	2,733,640
MADS Fiscal Year	2030	2030	2032	2030

Note: Fitch may have reclassified certain financial statement items for analytical purposes.
Source: Fitch Ratings, Fitch Solutions, University of California (CA)

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Key Definitions

Term	Definition	Significance
Issuer Default Rating (IDR)	An expression of overall enterprise risk and relative vulnerability to default.	Provides an opinion on the relative ability of an entity to meet financial commitments, expressed as an ordinal measure of credit risk.
Base Case	The expected forward-looking case in the current macroeconomic environment.	Provides the analytical starting point in the forward-looking analysis, and also informs the stress case.
Stress Case	Forward-looking performance under a common set of assumptions.	Illustrates how cycles affect individual institutions differently, and informs the level of rating stability and credit resiliency.
Adjusted Debt	Total long term debt + unfunded pension liability + an operating lease expense multiple or reported lease liability.	Provides an inclusive evaluation of total long term liabilities.
Available Funds	Cash + investments -permanently restricted net assets (including those of closely related foundations and endowments)	Provides an absolute measure of total balance sheet resources. Excludes bond proceeds.
Adjusted Operating Margin (%)	(Total Adjusted Operating Revenue - Total Operating Expense) / Total Adjusted Operating Revenue	Provides an operating performance measure inclusive of the endowment income available in operations.
Cash Flow	Adjusted Change in Unrestricted Net Assets from Operations + depreciation + amortization + interest expense + pension expense - pension contribution + non-cash OPEB Expense + other non-cash expenses.	Indicates the level of operating efficiency, using the level of an institution's operating surplus (or deficit) available to cover all of its annual outlays.
Cash Flow - Adjusted	Adjusted Change in Unrestricted Net Assets from Operations + depreciation + amortization + interest expense + pension expense + non-cash OPEB expense + other non-cash expenses - proportionate pension service cost	Indicates the absolute level of resources available to service debt obligations after the payment of cash-based operating expenses. Adjusted for non-recurring / extraordinary items.
Debt Service Coverage	Cash Flow / current debt service	Indicates the net income available to meet annual debt service requirements.
Average Age of Plant	Accumulated depreciation / depreciation expense	Provides an indication of the condition of the physical operating plant, and the level of needed reinvestment.
Capital Expenditures as % of Depreciation	Net acquisitions of property plant and equipment / depreciation expense	Indicates the level of investment in physical plant over time, which informs the need for future investment.

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